

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	98	570/101	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/22 14:18
L2	692	560/8	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/22 14:15
L3	1	L1 and L2	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/22 14:15
L4	55	570/203	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/22 14:19
S1	8	"4778940"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:22
S2	4	"4788353"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:23
S3	4	"4788354"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:26
S4	2100258	benzoic acid	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:27
S5	11097	iodination	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:27
S6	10758	S4 and S5	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:27
S7	85509	zeolite	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:27
S8	10758	S5 and S6	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:27

## EAST Search History

S9	2012962	oxidizing agent	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:27
S10	10169	S8 and S9	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:28
S11	518871	acetic anhydride	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:28
S12	4562	S10 and S11	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:28
S13	2099841	5-iodo-2-methylbenzoic acid	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:29
S14	4562	S12 and S13	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:29
S15	38170	sublimation	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/06/09 19:29
S16	37	S14 and S15	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:11
S17	2592707	halo substituted benzoic acid	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:12
S18	2115893	benzoic acid	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:13
S19	11207	iodination	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:13
S20	10865	S18 and S19	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:13
S21	2030739	Oxidizing agent	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:13

## EAST Search History

S22	10273	S20 and S21	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:13
S23	86254	zeolite	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:14
S24	68	S22 and S23	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:19
S25	17505	halogenation	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:19
S26	15017	S25 and S18	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:19
S27	578	S26 and S23	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:20
S28	461	S27 and S21	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:22
S29	2932383	iodination of aromatic acids	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:22
S30	1103028	S29 and S21	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:23
S31	35100	S30 and S23	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 00:23
S32	2	"4810826"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/18 08:14
S33	2	"6617344"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:13
S34	1306185	alkyl benzoic acid.clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:13

## EAST Search History

S35	11218	iodination	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:14
S36	9417	S34 and S35	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:14
S37	362113	acetic anhydride.clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:14
S38	4107	S36 and S37	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:14
S39	16314	zeolite.clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:15
S40	3	S38 and S39	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:18
S41	3	S40 and S37	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:18
S42	3	S41 and S34	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:18
S43	2032159	oxidizing agent	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:19
S44	732978	S34 and S43	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:20
S45	242343	S44 and S37	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:20
S46	1504	S45 and S39	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 12:24
S47	1061149	methyl benzoic acid.clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:48

## EAST Search History

S48	16882	iodine.clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:48
S49	13217	S47 and S48	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:48
S50	484178	microporous compound.clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:48
S51	8836	S49 and S50	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:48
S52	514576	oxidizing agent.clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:49
S53	3517	S51 and S52	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:49
S54	362113	acetic anhydride.clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:50
S55	1949	S53 and S54	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:50
S56	12400	purification.clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:50
S57	23	S55 and S56	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:52
S58	2288943	iodinated aromatic acids	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:53
S59	5326682	process	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:53
S60	1158661	S58 and S59	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:54

## EAST Search History

S61	334145	S60 and S50	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:54
S62	118226	S61 and S52	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:54
S63	55864	S62 and S54	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 13:55
S64	385	S63 and S56	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 14:02
S65	3	"5892138"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 14:39
S66	8	"4778940"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/21 16:31
S67	3	"5892138"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2007/07/22 14:10

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1  2  3  4  5  6
chain bonds :
2-11  4-7  5-10  7-8  7-9
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
5-10  7-8  7-9
exact bonds :
2-11  4-7
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6

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Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom

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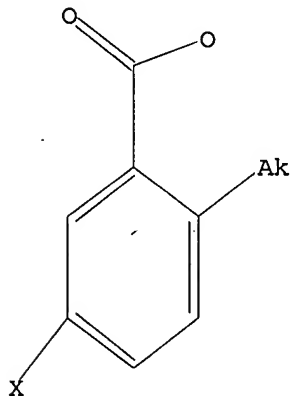
=> que L1

L2 QUE L1

=> d L1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s L1 full

FULL SEARCH INITIATED 19:07:20 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 648829 TO ITERATE

100.0% PROCESSED 648829 ITERATIONS

5222 ANSWERS

SEARCH TIME: 00.00.09

L3 5222 SEA SSS FUL L1

=> s L1

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SAMPLE SCREEN SEARCH COMPLETED - 32122 TO ITERATE

6.2% PROCESSED 2000 ITERATIONS

17 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 631725 TO 653155  
PROJECTED ANSWERS: 4469 TO 6451

L4 17 SEA SSS SAM L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

172.10

172.31

FILE 'CAPLUS' ENTERED AT 19:07:46 ON 09 JUN 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 9 Jun 2007 VOL 146 ISS 25

FILE LAST UPDATED: 8 Jun 2007 (20070608/ED)

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<http://www.cas.org/infopolicy.html>

=> s L4

L5 79 L4

=> d L5 1-79 bib abs hitstr

L5 ANSWER 1 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:117332 CAPLUS

DN 144:191984

TI Preparation of indanone potentiators of metabotropic glutamate receptors for use against neurol. and psychiatric disorders

IN Pinkerton, Anthony B.; Vernier, Jean-Michel; Cube, Rowena V.; Hutchinson, John H.; Bonnefous, Celine; Kamenecka, Theodore

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 90 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

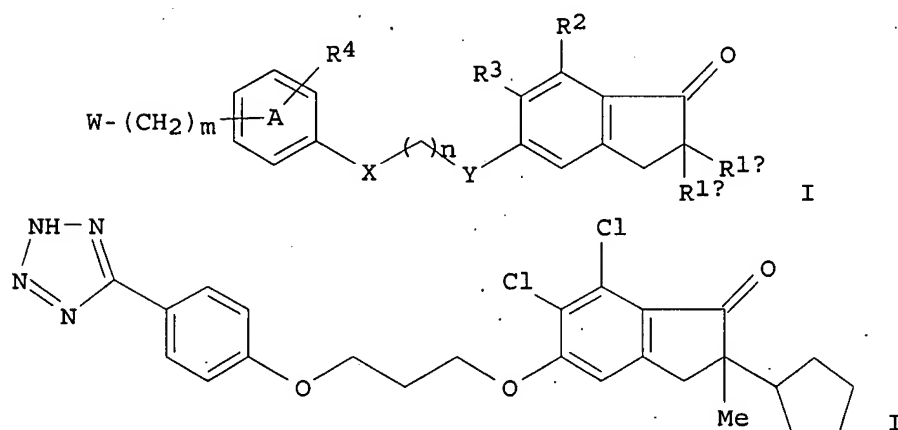
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006015158	A1	20060209	WO 2005-US26867	20050726
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	CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				
	GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ,				
	LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA,				
	NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,				
	SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,				
	ZA, ZM, ZW				

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

AU 2005267883 A1 20060209 AU 2005-267883 20050726  
CA 2574971 A1 20060209 CA 2005-2574971 20050726  
EP 1773792 A1 20070418 EP 2005-778397 20050726

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

PRAI US 2004-592549P P 20040730  
WO 2005-US26867 W 20050726  
OS CASREACT 144:191984; MARPAT 144:191984  
GI



AB The present invention is directed to indanones (some shown as I; variables defined below; e.g. 6,7-dichloro-2-cyclopentyl-2-methyl-5-[3-[4-(2H-tetrazol-5-yl)phenoxy]propoxy]indan-1-one (shown as II)) that are potentiators of metabotropic glutamate receptors, including the mGluR2 receptor, and which are useful in the treatment or prevention of neurol. and psychiatric disorders associated with glutamate dysfunction and diseases in which metabotropic glutamate receptors are involved. The invention is also directed to pharmaceutical compns. comprising these compds. and the use of these compds. and compns. in the prevention or treatment of such diseases in which metabotropic glutamate receptors are involved. Although the methods of preparation are not claimed, prepns. and/or characterization data for .apprx.70 examples of I are included. For example, II was prepared in 2 steps by 1st condensing 6,7-dichloro-2-cyclopentyl-5-hydroxy-2-methylindan-1-one with 4-(3-bromopropoxy)benzonitrile in the presence of K2CO3 to give 4-[3-[(6,7-dichloro-2-cyclopentyl-2-methyl-1-oxoindan-5-yl)oxy]propoxy]benzonitrile, which was cyclized with trimethylsilyl azide in the presence of dibutyltin oxide. For I: A is Ph or pyridyl; W = tetrazolyl, CO2H, NHSO2C1-6-alkyl, NHSO2-Ph (Ph is (un)substituted with C1-6-alkyl) and CONHCO-C1-6alkyl; X = -O-, -S-, a bond, -O-phenyl-, -S-phenyl-, and -phenyl-; Y = -O-, -NH(CO)-, and a bond; R1a and R1b = H, (un)substituted C1-6alkyl, (un)substituted C3-7cycloalkyl and (un)substituted phenyl; R2 = halo, hydroxy, OC1-6-alkyl, and (un)substituted C1-6alkyl; R3 = halo and (un)substituted C1-6-alkyl; R4 may include multiple substituents and = H, halo, C1-6-alkyl and -O-C1-6alkyl, or R4 may be joined to the Ph ring at an adjacent C to form a dihydrofuranyl ring; m = 0-3; n = 0-6; addnl. details are given in the claims. EC50 values for potentiation of metabotropic glutamate receptor 2 by examples of I are generally .ltorsim.10  $\mu$ M.

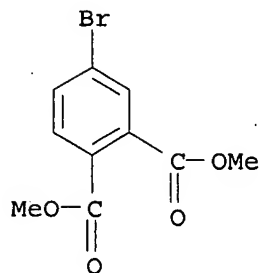
IT 87639-57-4, Dimethyl 4-bromophthalate

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of indanone potentiators of metabotropic glutamate receptors for use against neurol. and psychiatric disorders)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1082673 CAPLUS

DN 145:271847

TI Inhibitors of phenylalanine ammonia-lyase (PAL): Synthesis and biological evaluation of 5-substituted 2-aminoindane-2-phosphonic acids

AU Zon, Jerzy; Miziak, Piotr; Amrhein, Nikolaus; Gancarz, Roman

CS Institute of Organic Chemistry, Biochemistry and Biotechnology, Wrocław University of Technology, Wrocław, PL-50-370, Pol.

SO Chemistry & Biodiversity (2005), 2(9), 1187-1194

CODEN: CBHIAM; ISSN: 1612-1872

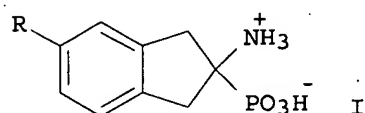
PB Verlag Helvetica Chimica Acta AG

DT Journal

LA English

OS CASREACT 145:271847

GI



AB A series of 5-substituted derivs. of the potent phenylalanine ammonia-lyase (PAL) inhibitor 2-aminoindane-2-phosphonic acid (AIP) I (R = H) were synthesized. The AIP analogs I (R = NO<sub>2</sub>, NH<sub>2</sub>, Me, Br or OH) were tested as in vitro inhibitors of buckwheat PAL, and as in vivo inhibitors of anthocyanin biosynthesis. Within this series, the racemic 5-bromo and 5-Me congeners were biol. most active, although being ca. one order of magnitude less potent than AIP proper.

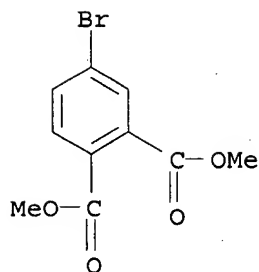
IT 87639-57-4P, Dimethyl 4-bromophthalate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of bis(bromomethyl)benzenes as starting compound for amino(indane)phosphonic acid analogs via reduction of substituted phthalic acids followed by bromination)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



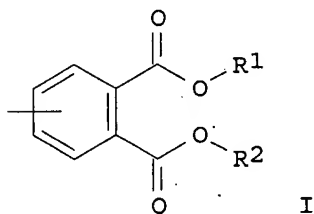
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2005:1050948 CAPLUS  
DN 143:326196  
TI Arylethynylphthalic acid derivative and method for producing the same  
IN Urazoe, Daisuke; Mori, Hideto; Yamakawa, Katsuyoshi  
PA Fuji Photo Film Co., Ltd., Japan  
SO U.S. Pat. Appl. Publ., 18 pp.  
CODEN: USXXCO

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005215820	A1	20050929	US 2005-88728	20050325
	JP 2006076991	A	20060323	JP 2005-69965	20050311
	EP 1586569	A1	20051019	EP 2005-6819	20050329
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
PRAI	JP 2004-90235	A	20040325		
	JP 2004-232675	A	20040809		
	JP 2005-69965	A	20050311		
OS	CASREACT 143:326196; MARPAT 143:326196				
GI					



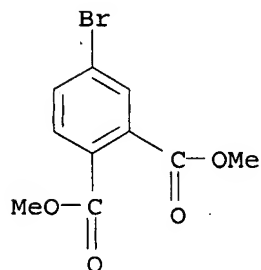
AB The invention provides arylethynylphthalic acid and derivs. thereof (including fluorine-containing compds.) Q1C.tplbond.CQ2 (Q1 = [substituted] aryl, Q2 = I, R1, R2 = alkyl, cycloalkyl, or aryl), and a method of producing these compds., in which the arylethynylphthalic anhydrides are formed by subjecting the arylphthalic acids to ring closing. Thus, heating 24.6 g di-Me 4-bromophthalate 12 h at 100° with 11.03 g, ethynylbenzene in presence of Ph3P, trans-dichlorobis(triphenylphosphine)palladium, CuI in Et3N, hydrolysis of the resulting di-Me 4-phenylethynylphthalate, and refluxing the resulting 4-phenylethynylphthalic acid 4 h in PhMe containing Ac2O gave 4-phenylethynylphthalic anhydride.

IT 87639-57-4, Dimethyl 4-bromophthalate  
RL: RCT (Reactant); RACT (Reactant or reagent)

(precursor; arylethynylphthalic acid derivs.)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 4 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:680310 CAPLUS

DN 141:202384

TI Iodine-containing phthalic acid derivatives, liposomes containing them, and their uses as x-ray contrast agents and scintigraphic agents

IN Nishigaki, Junji; Takahashi, Kazunobu; Aikawa, Kazuhiro

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

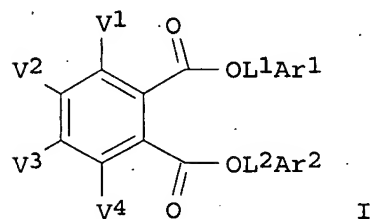
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004231625	A	20040819	JP 2003-25458	20030203
PRAI	JP 2003-25458		20030203		
OS	MARPAT 141:202384				
GI					



AB The derivs. I (V1-V4 = H, substituent;  $\geq 1$  of V1-V4 = substituent; Ar1, Ar2 = H, alkyl, aryl; L1, L2 = divalent linking group; if Ar1 = Ar2 = H, then  $\geq 1$  of V1-V4 = iodine; if none of V1-V4 = iodine, then Ar1 and/or Ar2 = aryl having  $\geq 1$  iodine) or their salts are claimed. Liposomes containing I or their salts as membrane components are useful as x-ray contrast agents especially for imaging of vascular diseases and as scintigraphic agents if  $\geq 1$  iodine of I is radioisotope. I are metabolized by liver and not accumulated. Thus, liposomes containing dipalmitoylphosphatidylcholine, dipalmitoylphosphatidylserine, and I [V1 = V2 = V4 = iodine, V3 = H, L1Ar1 = L2Ar2 = (CH2)9Me] (preparation given) were effectively incorporated by vascular smooth muscle cells in a coculture system with macrophages.

IT 741265-94-1

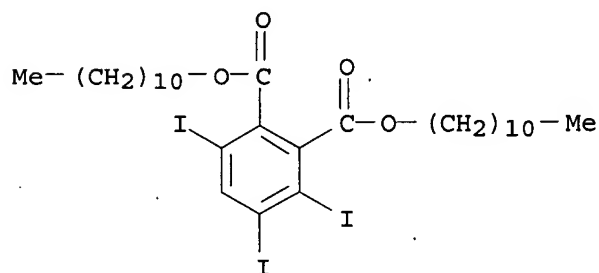
RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of (radio)iodine-containing phthalic acid derivs., liposomes containing

them, and their uses as x-ray contrast agents and scintigraphic agents for imaging of artery diseases)

RN 741265-94-1 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-triiodo-, diundecyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 5 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:330840 CAPLUS

DN 140:365565

TI Photographic dry imaging material and method for image formation using the same

IN Kimura, Sok Man Ho

PA Konica Minolta Holdings Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 59 pp.

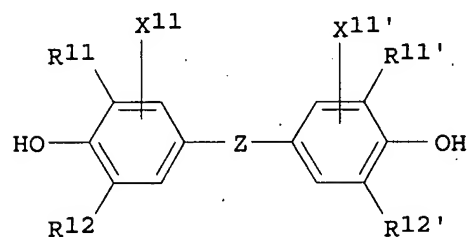
CODEN: JKXXAF

DT Patent

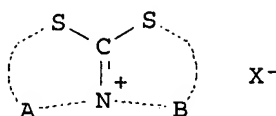
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004126201	A	20040422	JP 2002-289843	20021002
PRAI	JP 2002-289843		20021002		
OS	MARPAT 140:365565				
GI					



I



II

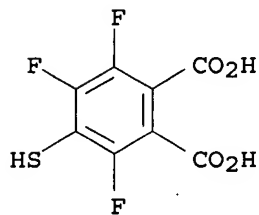
AB The title imaging material contains light-sensitive emulsion made of light-insensitive silver aliphatic carboxylate particles and light-sensitive silver halide particles, a reducing agent for Ag ions, a binder, and a crosslinking agent, wherein the light-sensitive silver halide grains are chemical sensitized and contain compound I (Z = S, -C(R13)(R13')-; R13, R13' = H, substituent; R11-12, R11'-12' = substituent; X11, X11' = H, substituent) and one of II(A, B = non metallic residual of heterocyclic ring; X-1 = ionic ion), R13-S-M, and R41-SO2-S-M(S = S; R31, R41 = aliphatic hydrocarbon, aryl, heterocyclic ring; M = cationic ion). The imaging material shows good storageability and high sensitivity and provides images of low fogging, high quality, and good silver tone.

IT 112056-11-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(photog. dry imaging material)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX  
NAME)



L5 ANSWER 6 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:329149 CAPLUS

DN 140:357193

TI Purification of ethynyl group-containing phthalic anhydrides

IN Kimura, Keizo; Yamakawa, Kazuyoshi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 22 pp.

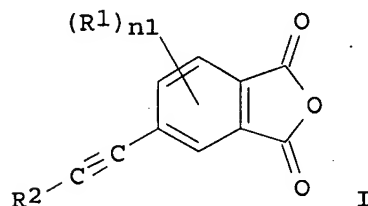
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004123573	A	20040422	JP 2002-287260	20020930
PRAI	JP 2002-287260		20020930		
OS	MARPAT 140:357193				
GI					



AB Title compds. I (R1 = substituent; n1 = 0-3; R2 = H,  $\alpha$ -hydroxyalkyl, SiR3R4R5; R3-R5 = alkyl, aryl), useful as intermediates for thermosetting resins, liquid crystals, nonlinear optical materials, and photog. additives, are purified by crystallization from mixts. of  $\geq 2$  solvents. 3-Ethynylphthalic acid was dehydrated by activated C in o-xylene under reflux and crystallized from AcOEt-n-hexane to give 85% I (R2 = H, n1 = 0) with  $\geq 99.9\%$  purity.

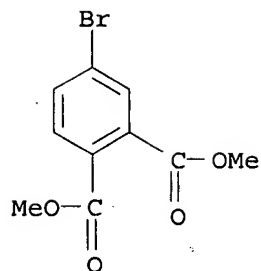
IT 87639-57-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(purification of ethynyl group-containing phthalic anhydrides by crystallization)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX  
NAME)



L5 ANSWER 7 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:219208 CAPLUS

DN 140:261335

TI Silver salt-type photothermographic dry imaging materials and image formation using them

IN Kimura, Sok Man Ho

PA Konica Minolta Holdings Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 55 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004085774	A	20040318	JP 2002-245014	20020826
PRAI	JP 2002-245014		20020826		

OS MARPAT 140:261335

AB In the materials comprising (A) photosensitive emulsions containing nonphotosensitive aliphatic carboxylic acid Ag salt particles and photosensitive Ag halide particles, (B) reducing agents for Ag ions, (C) binders, and (D) crosslinking agents, the materials contain [AOC(:O)]<sub>m</sub>ZlS(:O)<sub>2</sub>SM<sub>1</sub> [Zl = atom, aliphatic group, aryl, and/or heterocyclic group; A = H, SH, CH<sub>2</sub>SH, NH<sub>2</sub>, alkyl, (un)substituted aryl; M<sub>1</sub> = H, metal atom, quaternary ammonium salt, phosphonium; m = 1-20] or R(CO<sub>2</sub>M)<sub>n</sub> [R = atom, aliphatic group, aromatic group, and/or heterocyclic group; M = H, metal atom, quaternary ammonium salt, phosphonium, alkyl, (un)substituted aryl; n = 2-20]. Images are formed by exposing the materials to 600-900-nm red or IR laser light and thermally developing. The materials show high sensitivity, low fog, and good storage stability.

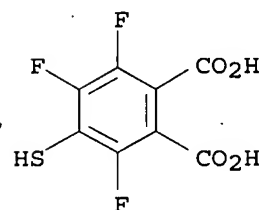
IT 112056-11-8

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(silver salt-type photothermog. dry imaging materials for low-fog image formation)

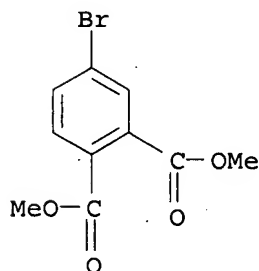
RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 8 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

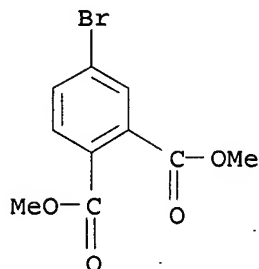
AN 2003:1000504 CAPLUS  
 DN 141:242819  
 TI Product class 4: organometallic complexes of copper  
 AU Heaney, H.; Christie, S.  
 CS Dept. of Chemistry, University of Loughborough, Loughborough, LE11 3TU, UK  
 SO Science of Synthesis (2004), 3, 305-662  
 CODEN: SSCYJ9  
 PB Georg Thieme Verlag  
 DT Journal; General Review  
 LA English  
 AB A review. The use of copper and related complexes in applications to organic synthesis is reviewed.  
 IT 87639-57-4, Dimethyl 4-bromophthalate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (applications of copper and organocopper complexes to organic synthesis)  
 RN 87639-57-4 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



RE.CNT 1706 THERE ARE 1706 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

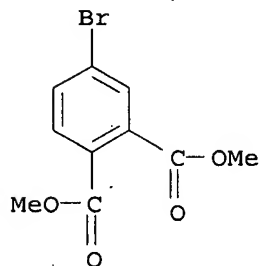
L5 ANSWER 9 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2003:284655 CAPLUS  
 DN 139:21959  
 TI Palladium-Catalyzed Tetrakis(dimethylamino)ethylene-Promoted Reductive Coupling of Aryl Halides  
 AU Kuroboshi, Manabu; Waki, Yoko; Tanaka, Hideo  
 CS Department of Applied Chemistry, Faculty of Engineering, Okayama University, Okayama, 700-8530, Japan  
 SO Journal of Organic Chemistry (2003), 68(10), 3938-3942  
 CODEN: JOCEAH; ISSN: 0022-3263  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 139:21959  
 AB Tetrakis(dimethylamino)ethylene /PdCl<sub>2</sub>(PhCN)<sub>2</sub>-promoted reductive coupling of aryl bromides RBr (R = Ph, 4-MeOC<sub>6</sub>H<sub>4</sub>, 4-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 4-Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, etc.) having either electron-donating or electron-withdrawing groups on their para- and/or meta-position or heteroaryl bromides, e.g. 2-bromopyridine, 4-bromopyridine, proceeded smoothly to afford the corresponding biaryls RR in good to excellent yields (75-98%). Notably, the easily reducible groups, such as carbonyl and nitro groups, are tolerated. A similar reductive coupling of ortho-substituted aryl bromides was unsuccessful. The proper choice of palladium catalysts is essential; thus, PdCl<sub>2</sub>(PhCN)<sub>2</sub>, PdCl<sub>2</sub>(MeCN)<sub>2</sub>, Pd<sub>2</sub>(dba)<sub>3</sub>, PdCl<sub>2</sub>, and Pd(OAc)<sub>2</sub> were used successfully for this reaction, but phosphine-ligated palladium catalysts, such as Pd(PPh<sub>3</sub>)<sub>4</sub> or PdCl<sub>2</sub>(PPh<sub>3</sub>)<sub>2</sub>, did not promote the reaction. The reductive coupling also did not occur with nickel catalysts such as NiBr<sub>2</sub>, NiCl<sub>2</sub>(bpy), and Ni(acac)<sub>2</sub>. The reductive coupling of aryl halides having electron-withdrawing groups occurred more efficiently than that of aryl halides substituted with electron-donating groups.

IT 87639-57-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of sym. biaryls via Pd-catalyzed tetrakis(dimethylamino)ethylen  
 e- promoted reductive coupling of aryl and heteroaryl halides)  
 RN 87639-57-4 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX  
 NAME)



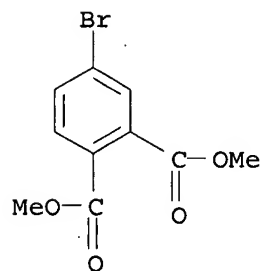
RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2002:348564 CAPLUS  
 DN 137:140317  
 TI Study on the bromination of deactivated aromatics  
 AU Chen, Hong-Biao; Lin, Yuan-Bin; Liu, Zheng-Chun; Liu, Zhan-Peng  
 CS College of Chemistry, Xiangtan University, Xiangtan, 411105, Peop. Rep.  
 China  
 SO Youji Huaxue (2002), 22(5), 371-374  
 CODEN: YCHHDX; ISSN: 0253-2786  
 PB Kexue Chubanshe  
 DT Journal  
 LA Chinese  
 OS CASREACT 137:140317  
 AB Bromination of deactivated aroms. has been studied in detail. Some  
 deactivated aroms. such as trifluoromethylbenzene could be brominated with  
 good results by using KBrO3-H2SO4 as brominating reagent. The effects of  
 reaction conditions, such as concentration and quantity of sulfuric acid,  
 reaction temperature and different deactivated groups are investigated.  
 IT 87639-57-4P, Dimethyl 4-bromophthalate  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (bromination of deactivated aroms.)  
 RN 87639-57-4 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX  
 NAME)



L5 ANSWER 11 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2002:295916 CAPLUS

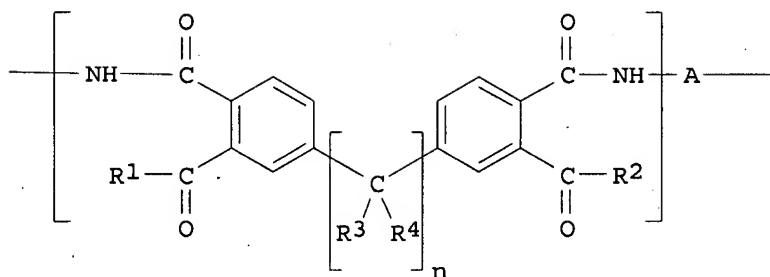
DN 137:154713  
 TI Tetrakis(dimethylamino)ethylene (TDAE)-Pd promoted reductive homo-coupling of aryl halides  
 AU Kuroboshi, Manabu; Waki, Yoko; Tanaka, Hideo  
 CS Department of Applied Chemistry, Faculty of Engineering, Okayama University, Okayama, 700-8530, Japan  
 SO Synlett (2002), (4), 637-639  
 CODEN: SYNLES; ISSN: 0936-5214  
 PB Georg Thieme Verlag  
 DT Journal  
 LA English  
 OS CASREACT 137:154713  
 AB A combination of tetrakis(dimethylamino)ethylene (TDAE) and Pd catalysts promoted reductive homo-coupling of aryl halides efficiently to afford the corresponding biaryls in good to quant. yields. TDAE acted as a very mild reductant, and easily reducible functional groups, such as a nitro, formyl, ester, or nitrile group, remained unchanged.  
 IT 87639-57-4, Dimethyl 4-bromophthalate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of biaryls by tetrakis(dimethylamino)ethylene-palladium promoted reductive homo-coupling of aryl halides)  
 RN 87639-57-4 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



RE.CNT 48      THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

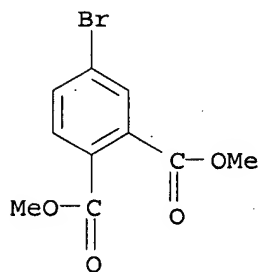
L5 ANSWER 12 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2002:253289 CAPLUS  
 DN 136:301774  
 TI Photosensitive resin compositions containing polyimide precursors, patterning using them, and electronic devices  
 IN Takusari, Hisanori  
 PA Hitachi Chemical Du Pont Micro System Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002099083	A	20020405	JP 2000-287867	20000922
PRAI	JP 2000-287867		20000922		
GI					



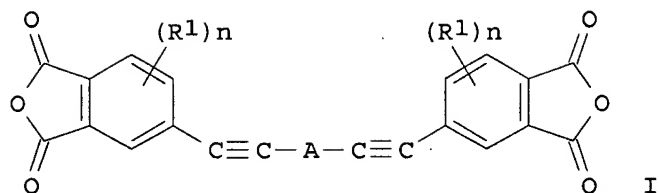
I

- AB The compns. containing polyimide precursors having a repeating unit I (A = organic linking group; R1, R2 = OH, monovalent organic group; R3, R4 = H, C1-10 alkyl; n = 5-20) are used for formation of a patterned film such as a surface protective film or an interlayer insulating film in fabrication of electronic devices. The resin compns. have good transparency to i-ray and high resolution
- IT 87639-57-4, Dimethyl 4-bromophthalate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (photosensitive resin compns. containing polyimide precursors for electronic devices)
- RN 87639-57-4 CAPLUS
- CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



- L5 ANSWER 13 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 2002:169592 CAPLUS
- DN 136:217178
- TI Preparation of acetylene group-containing aromatic tetracarboxylic acid dianhydrides and their derivatives
- IN Tagusari, Hisanori
- PA Hitachi Chemical Du Pont Micro System Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF
- DT Patent
- LA Japanese
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002069065	A	20020308	JP 2000-254057	20000824
PRAI	JP 2000-254057		20000824		
OS	MARPAT 136:217178				
GI					

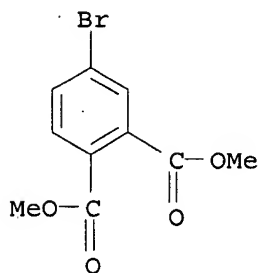


AB Compds. I (R1 = C1-10 alkyl; A = divalent organic group; n = 0-3) useful as curing agents for epoxy resins and for preparation of polyimides are prepared. Thus, di-Me 4-bromophthalate and 1,9-decadiyne were reacted to give 1,10-di[3,4-di(methoxycarbonyl)phenyl]-1,9-decadiyne, which was hydrolyzed and heated in the presence of Ac2O to give 1,10-bis(3,4-dicarboxyphenyl)-1,9-decadiyne dianhydride.

IT 87639-57-4, Dimethyl 4-bromophthalate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation of acetylene group-containing aromatic tetracarboxylic acid dianhydrides and their derivs.)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 14 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2002:157732 CAPLUS

DN 136:216540

TI Preparation of novel thiocarbamic acid derivatives as vanilloid receptor antagonists

IN Suh, Young Ger; Oh, Uh Taek; Kim, Hee Doo; Lee, Jee Woo; Park, Hyeung Geun; Park, Young Ho; Yi, Jung Bum

PA Pacific Corporation, S. Korea

SO PCT Int. Appl., 102 pp.  
 CODEN: PIXXD2

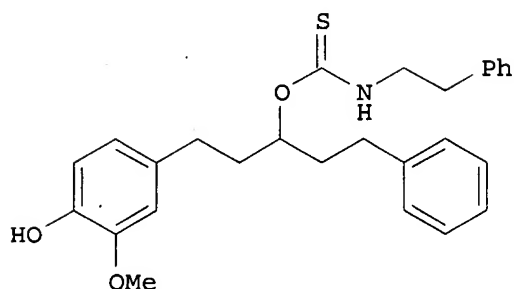
DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002016317	A1	20020228	WO 2001-KR1409	20010820
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001078821	A5	20020304	AU 2001-78821	20010820

KR 2002030010	A	20020422	KR 2001-50094	20010820
EP 1311477	A1	20030521	EP 2001-957037	20010820
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003203944	A1	20031030	US 2003-343703	20030203
US 2006264480	A1	20061123	US 2006-373828	20060313
PRAI KR 2000-48387	A	20000821		
WO 2001-KR1409	W	20010820		
US 2003-343703	B1	20030203		
OS MARPAT 136:216540				
GI				

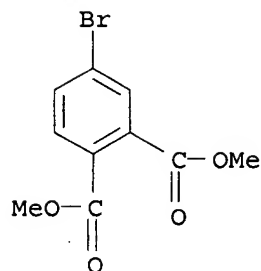


AB The title compds. ArACH<sub>2</sub>CHR<sub>2</sub>ZC(:Y)NHR<sub>1</sub> [R<sub>1</sub> = (CH<sub>2</sub>)<sub>m</sub>Ar<sub>1</sub> (Ar<sub>1</sub> = (un)substituted Ph, pyridyl, thiophenyl, naphthyl; m = 1-4), (CH<sub>2</sub>)<sub>n</sub>CHPh<sub>2</sub>, (CH<sub>2</sub>)<sub>2</sub>CHPhCH<sub>2</sub>Ph (n = 1-2); Y = S, O; Z = O, CH<sub>2</sub>, NR<sub>3</sub>, CHR<sub>3</sub> (R<sub>3</sub> = H, alkyl, CH<sub>2</sub>Ph, (CH<sub>2</sub>)<sub>2</sub>Ph); R<sub>2</sub> = H, alkyl, cycloalkyl, etc.; A = O, CH<sub>2</sub>; Ar = (un)substituted Ph, pyridyl, indolyl, imidazolyl], useful as antagonists against vanilloid receptor, were prepared E.g., a multi-step synthesis of I which showed antagonistic potency equal to capsazepine in patchclamp test for vanilloid receptor activity, was given. As diseases associated with the activity of vanilloid receptor, pain, acute pain, chronic pain, neuropathic pain, post-operative pain, migraine, arthralgia, neuropathies, nerve injury, diabetic neuropathy, neurodegeneration, neurotic skin disorder, stroke, urinary bladder hypersensitiveness, irritable bowel syndrome, a respiratory disorder such as asthma or chronic obstructive pulmonary disease, irritation of skin, eye or mucous membrane, fevescence, stomach-duodenal ulcer, inflammatory bowel disease and inflammatory diseases can be enumerated. The present invention provides a pharmaceutical composition for prevention or treatment of these diseases.

IT 87639-57-4P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of novel thiocarbamic acid derivs. as vanilloid receptor antagonists)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)

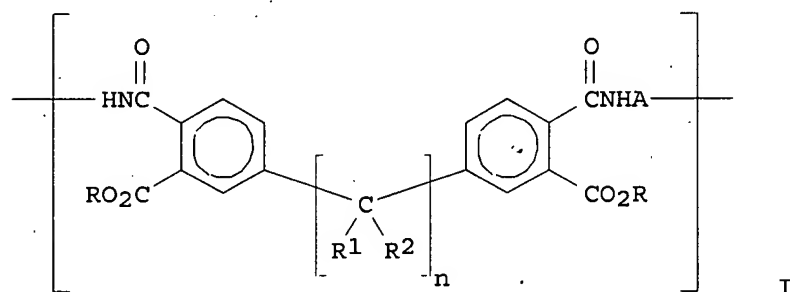


RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2001:855841 CAPLUS  
DN 136:6928  
TI Low-temperature curable resin compositions containing polyimide precursors  
IN Takusari, Kazunori  
PA Hitachi Chemical Du Pont Micro System Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001329170	A	20011127	JP 2000-148841	20000519
PRAI	JP 2000-148841		20000519		

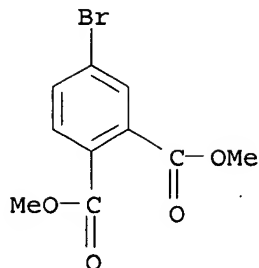
GI



AB The composition comprises a polyimide precursor with repeating unit I (A = divalent organic group; R = H, C1-6 alkyl; R1, R2 = H, C1-10 alkyl; n = 5-20), which can be imidized at low temperature. Thus, 0.60 parts 1,4-phenylenediamine was mixed with 2.40 parts 1,10-bis[3,4-di(carboxy)phenyl]decane dianhydride at room temperature for 24 h to give a polyimide precursor with weight average mol. weight 65,000, which was coated on a glass plate, dried at 100° for 1 min, and cured at 275° for 30 min, showing imidization rate 100%.

IT 87639-57-4P, Dimethyl 4-Bromophthalate  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of polyimide precursors for low-temperature curable resin compns.)

RN 87639-57-4 CAPLUS  
CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



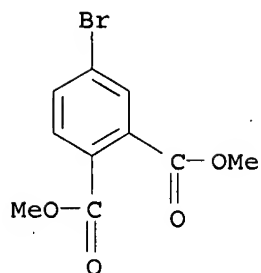
L5 ANSWER 16 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2001:345429 CAPLUS  
 DN 134:359575  
 TI Composition of polyamic acid or polyimide for liquid crystal alignment film, the alignment film, substrate sandwiching liquid crystal, and display device  
 IN Takusari, Hisanori; Okuda, Naoki  
 PA Hitachi Chemical Du Pont Micro System Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001131285	A	20010515	JP 1999-309023	19991029
PRAI	JP 1999-309023		19991029		

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The polyamic acid is that having repeating unit I (A = divalent organic group; R1, R2 = H, c1-10 alkyl; n = 5-20) and the polyimide is that having repeating unit II (definitions of A, R1, R2, and n are the same in I), each of which is contained in the claimed composition for forming the claimed liquid crystal alignment film. The substrate sandwiching a liquid crystal using the alignment film and the liquid crystal display device made of the substrate are also claimed. Adsorption of ionic impurities from the liquid crystal on the alignment film is avoided so that clear images are displayed in the device.  
 IT 87639-57-4P, Dimethyl 4-bromophthalate  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (intermediate for monomer; composition of polyamic acid or polyimide for liquid crystal alignment film for display device from)  
 RN 87639-57-4 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 17 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:865368 CAPLUS

DN 134:42564

TI Alkylene-containing aromatic tetracarboxylic dianhydrides, their derivatives, and their manufacture

IN Tagusari, Hisanori; Arai, Noriyoshi; Okuda, Naoki

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000344759	A	20001212	JP 1999-158113	19990604
PRAI	JP 1999-158113		19990604		

OS MARPAT 134:42564

AB Alkylene-containing aromatic tetracarboxylic dianhydrides and their derivs., which are useful in producing polyimides and curing agents for epoxy resins, are synthesized. Thus 1,10-bis[3,4-di(carboxy)phenyl]decane dianhydride was prepared by (1) reacting 4-bromophthalic anhydride with methanol to obtain di-Me 4-bromophthalate, (2) reacting the bromophthalate with 1,9-decadiyne to give 1,10-bis[3,4-di(methoxycarbonyl)phenyl]-1,9-decadiyne, (3) hydrolyzing the di-Me ester to give the corresponding free tetracarboxylic acid, (4) obtaining 1,10-bis[3,4-di(methoxycarbonyl)phenyl]decane by hydrogenation of the free acid over Pd/charcoal, and (5) dehydrating.

IT 87639-57-4P, Dimethyl 4-bromophthalate

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

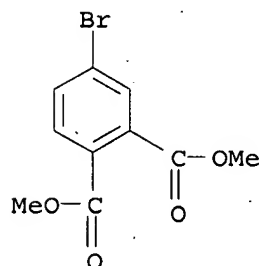
(alkylene-containing aromatic tetracarboxylic dianhydrides, their derivs.,

and

their manufacture)

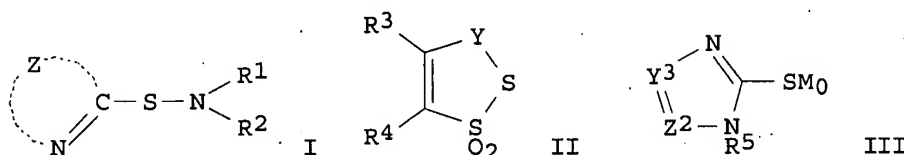
RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 18 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2000:767985 CAPLUS  
 DN 133:342398  
 TI Silver halide photographic material and processing thereof  
 IN Ono, Koji  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, .55 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000305210	A	20001102	JP 1999-109150	19990416
PRAI	JP 1999-109150		19990416		
OS	MARPAT 133:342398				
GI					

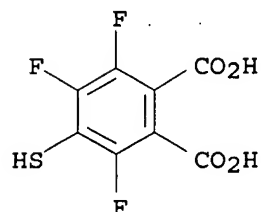


AB The title photog. material possesses a Ag halide emulsion layer containing Ag halide grains which are formed by carrying out grain growth while a solution containing salts is being removed occasionally from the reaction product solution by ultrafiltration in the grain growth process or chemical sensitized with a compound R11R12Au(I)SR13 [R11, R13 = (substituted) aliphatic hydrocarbon, aromatic hydrocarbon, heterocyclic group, R11 and R13 are the same or different; R13 = SO2S, Sk; k = 2-6] and contains a compound I (Z = atoms required to form a 5- or 6-membered heterocycle which may be substituted and condensed with benzene ring; R1, R2 = H, alkyl, aryl, aralkyl, R1 and R2 may link each other to form a N-containing heterocycle) in  $\geq 1$  of the constitutive layers. The material may contain the compound I and a compound II [Y = CO, CS, CSe, CH2, (CH2)2; R3, R4 = aliphatic, aromatic or heterocyclic group, atoms required to form a 5- or 6-membered ring or polycyclic system in combination of R3 and R4], AlmY0A2nA3r, or AlmY1A2nA3r-1Z1pY2A1'm1A2'n1A3'r1-1 [A1, A1' = SO3M, CO2M, OM (M = H, metal atom, quaternary ammonium, phosphonium); m, m1, n, n1 = 1-10; A2, A2' = electron-attracting group; A3, A3' = functional group containing S, Se or Te atom capable of binding to Ag+; r, r1 = 1 or 2; Y0, Y1, Y2 = aliphatic aromatic or heterocyclic group; Z1 = S, Se, Te; p = 1 or 2]. The material is processed with a developing solution containing reductones and 1 selected from I-, sugars, a polyalkylene oxide compound, and a compound III [Y3, Z2 = N, CR6 {R6 = H, (substituted) alkyl, (substituted) aryl}; R5 = alkyl substituted by  $\geq 1$  sulfo, CO2H, NH2, OH or its salt or boron residue (when the group has plural substituents, they are the same or different); M0 = H, alkali metal, quaternary ammonium, group capable of becoming H or an alkali metal under alkaline conditions]. The material especially useful in medical use shows high sensitivity, good Ag tone, and low residual color stain in rapid processing using a low replenishment rate and improved storage stability.

IT 112056-11-8  
 RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
 (photog. film suited for medical use)

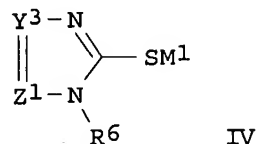
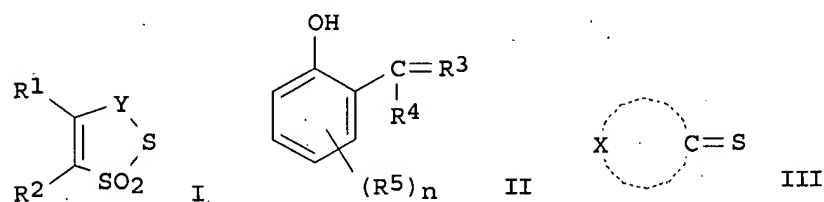
RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 19 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2000:767984 CAPLUS  
 DN 133:342397  
 TI Silver halide photographic material and processing thereof  
 IN Ono, Koji  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, 57 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000305209	A	20001102	JP 1999-110797	19990419
PRAI	JP 1999-110797		19990419		
OS	MARPAT 133:342397				
GI					



AB The title photog. material, possessing Ag halide emulsion layers and non-photosensitive layers on a support, contains Ag halide grains which are formed by carrying out grain growth while a solution containing salts is being removed occasionally from the reaction product solution by ultrafiltration in the grain growth process or chemical sensitized with a compound  $R_{11}R_{12}Au(I)SR_{13}$  [ $R_{11}$ ,  $R_{13}$  = (substituted) aliphatic hydrocarbon, aromatic hydrocarbon, heterocyclic group,  $R_{11}$  and  $R_{13}$  are the same or different;  $R_{12}$  =  $SO_2S$ , Sm;  $m = 2-6$ ] in  $\geq 1$  of the emulsion layers and a compound I [ $Y = CO, CS, CSe, CH_2, (CH_2)_2$ ;  $R_1, R_2$  = aliphatic, aromatic or heterocyclic group, atoms required to form a 5- or 6-membered ring or polycyclic system in combination of  $R_1$  and  $R_2$ ] in  $\geq 1$  of the constitutive layers. The

material may contain, in  $\geq 1$  of the constitutive layers, the compound I and a compound II ( $R_3 = O, NOH, NH$ ; when  $R_3 = O, R_4 = NHOH$  or  $NH_2$ , when  $R_3 = NOH$  or  $NH, R_4 = H, OH, C \leq 2$  alkyl,  $C \leq 2$  hydroxyalkyl,  $C \leq 2$  alkoxy;  $R_5 = H, halo, acyl, amino, acylamino, NO_2, CN, C \leq 4$  alkyl, alkoxy,  $OH, CO_2H$  or its salt, sulfo or its salt;  $n = 0-2$ ), III [ $X =$  atoms required to form a heterocycle which has  $\geq 1$  group selected from  $SO_3M, CO_2M$ , and  $OM$  ( $M = H$ , metal atom, quaternary ammonium, phosphonium) directly or indirectly along with the  $CS$  group, the heterocycle has no partial structure  $NHCSNR$  ( $R = H$ , univalent substituent)],  $AlmYA2nA3r$ , or  $AlmY1A2nA3r-1ZpY2A1'm'A2'n'A3'r'-1$  [ $A1, A1' = SO_3M, CO_2M, OM$  ( $M = H$ , metal atom, quaternary ammonium, phosphonium);  $m, m', n, n' = 1-10$ ;  $A2, A2' =$  electron-attracting group;  $A3, A3' =$  functional group containing  $S, Se$  or  $Te$  atom capable of binding to  $Ag^+$ ;  $r, r' = 1$  or  $2$ ;  $Y, Y1, Y2 =$  aliphatic aromatic or heterocyclic group;  $Z = S, Se, Te$ ;

p

$= 1$  or  $2$ ]. The material is processed with a developing solution containing reductones and 1 selected from I-, sugars, a polyalkylene oxide compound, and a compound IV [ $Y3, Z1 = N, CR7$  ( $R7 = H$ , (substituted) alkyl, (substituted) aryl);  $R6 =$  alkyl substituted by  $\geq 1$  sulfo,  $CO_2H$ , amino,  $OH$  or its salt or boron residue (when the group has plural substituents, they are the same or different);  $M1 = H$ , alkali metal, quaternary ammonium, group capable of becoming  $H$  or an alkali metal under alkaline conditions]. The material especially useful in medical use shows high sensitivity, good  $Ag$  tone, and low residual color stain in rapid processing using a low replenishment rate and improved storage stability.

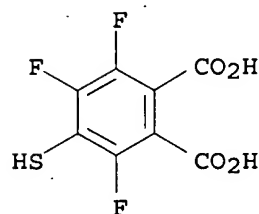
IT 112056-11-8

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(photog. film suited for rapid processing)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 20 OF 79 CAPLUS . COPYRIGHT 2007 ACS on STN

AN 2000:418029 CAPLUS

DN 133:51305

TI Silver halide photographic emulsion, photographic material, and x-ray radiography

IN Kimura, Sok Man Ho

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 42 pp.

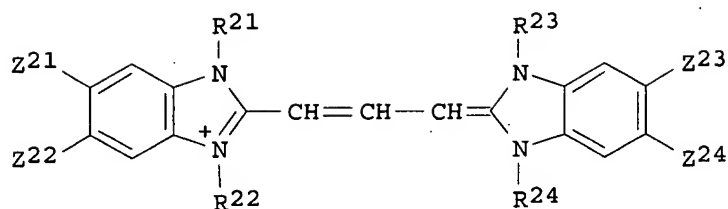
CODEN: JKXXAF

DT Patent

LA Japanese

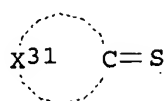
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000171932	A	20000623	JP 1998-350109	19981209
PRAI	JP 1998-350109		19981209		
OS	MARPAT 133:51305				
GI					



(X21)<sub>n-1</sub>

I



II

AB The emulsion contains reduction-sensitized grains, R<sub>1</sub>R<sub>2</sub>AuIR<sub>3</sub>R<sub>4</sub> [R<sub>2</sub>, R<sub>3</sub> = SO<sub>2</sub>S, Sm, Sem, Tem; m = 1-6; R<sub>1</sub>, R<sub>4</sub> = (un)substituted aliphatic hydrocarbon residue, aromatic hydrocarbon residue, heterocycle] optionally associated with ≥1 selected from I [R<sub>21</sub>, R<sub>23</sub> = (un)substituted lower alkyl or alkenyl; R<sub>22</sub>, R<sub>24</sub> = alkyl; Z<sub>21</sub>, Z<sub>22</sub>, Z<sub>23</sub>, Z<sub>24</sub> = H, substituent; X<sub>21</sub> = ions required to neutralize intramol. charge; n = 1, 2], II (X<sub>31</sub> = atoms to form a heterocyclic ring directly or indirectly containing SO<sub>3</sub>M<sub>31</sub>, COOM<sub>31</sub>, or OM<sub>31</sub>; M<sub>31</sub> = H, metal, quaternary ammonium, phosphonium), YAlmA<sub>2</sub>nA<sub>3</sub>r (III; A<sub>1</sub> = SO<sub>3</sub>M<sub>1</sub>, COOM<sub>1</sub>, OM<sub>1</sub>; M<sub>1</sub> = H, metal, quaternary ammonium, phosphonium; m = 1-10; A<sub>2</sub> = electron-withdrawing group; n = 1-10; A<sub>3</sub> = functional group making link with Ag ion, containing Se, Se, or Te; r = 1, 2; Y = aliphatic hydrocarbon residue, aromatic hydrocarbon, heterocycle), and AlmA<sub>2</sub>mA<sub>3</sub>r-1Y<sub>1</sub>ZpY<sub>2</sub>A<sub>1</sub>'m'A<sub>2</sub>'n'A<sub>3</sub>'r-1 [A<sub>1</sub>, A<sub>2</sub>, A<sub>3</sub>, m, n, r = the same as those in III; A<sub>1</sub>' = SO<sub>3</sub>M<sub>1</sub>, COOM<sub>1</sub>, OM<sub>1</sub>; M<sub>1</sub> = the same as those in III; A<sub>2</sub>' = electron attractive group; A<sub>3</sub>' = functional group to be linked to Ag ion, containing S, Se, or Te; Y<sub>1</sub>, Y<sub>2</sub> = aliphatic hydrocarbon residue, aromatic hydrocarbon, heterocyclic ring; Z = S, Se, Te; p = 1, 2; m + m', n + n' 1-20]. The material containing the obtained emulsion is also claimed. The material is exposed to x-ray radiation and contacted with intensifying screen with 68-90% fluorescent substance packing. The material shows low fog, high sensitivity, small dye stain, and improved storage stability in low replenishment and rapid processing.

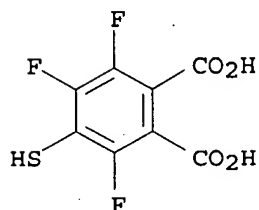
IT 112056-11-8

RL: MOA (Modifier or additive use); USES (Uses)

(in silver halide radiog. emulsion containing gold compound sensitizer)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 21 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:398993 CAPLUS

DN 133:51107

TI Silver halide photographic emulsion and preparation thereof

IN Taguchi, Masaaki

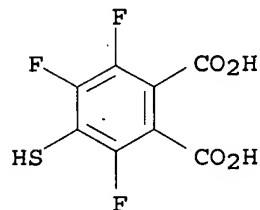
PA Konica Co., Japan; Konica Minolta Holdings, Inc.  
 SO Jpn. Kokai Tokkyo Koho, 25 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000162728	A	20000616	JP 1998-334192	19981125
	JP 3687371	B2	20050824		
PRAI	JP 1998-334192		19981125		

AB The title photog. emulsion contains Ag halide grains in which the average intergrain distance in Ag halide grain growth process, defined by the equation average intergrain distance = (volume of reaction solution/number of growing grains in reaction solution)<sup>1/3</sup>, is arbitrarily controlled throughout from the beginning to the completion of grain growth and to which photog. useful substances are added upon growing 0.6-1.15 times the average intergrain distance upon the beginning of grain growth or in the step from the completion of grain growth to the beginning of chemical ripening. A method of preparing the emulsion is also claimed, in which the average intergrain distance is controlled by a disperse medium-introducing, water-introducing or aqueous solution-discharging means. The emulsion shows high sensitivity, sharpness, and covering power in rapid processing, low residual color stain, and little uneven d.

IT 112056-11-8  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (photog. emulsion containing intergrain distance-controlled silver halide grain)

RN 112056-11-8 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 22 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2000:291065 CAPLUS  
 DN 132:308547  
 TI Method for the production and use of bile acid substituted phenyl alkenoyl guanidines as medicaments or diagnostic agents and of medicaments that contain them  
 IN Weichert, Andreas; Enhnsen, Alfons; Falk, Eugen; Jansen, Hans-Willi; Kramer, Werner; Schwark, Jan-Robert; Lang, Hans Jochen  
 PA Aventis Pharma Deutschland G.m.b.H., Germany  
 SO PCT Int. Appl., 46 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000024761	A1	20000504	WO 1999-EP7828	19991015
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,				

IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,  
 MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,  
 SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

DE 19849722	A1	20000504	DE 1998-19849722	19981028
CA 2349523	A1	20000504	CA 1999-2349523	19991015
AU 9962032	A	20000515	AU 1999-62032	19991015
AU 757365	B2	20030220		
BR 9914929	A	20010710	BR 1999-14929	19991015
TR 200101163	T2	20010821	TR 2001-200101163	19991015
EP 1124841	A1	20010822	EP 1999-949001	19991015
EP 1124841	B1	20030402		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
HU 200103751	A2	20020429	HU 2001-3751	19991015
JP 2002528460	T	20020903	JP 2000-578331	19991015
AT 236191	T	20030415	AT 1999-949001	19991015
PT 1124841	T	20030829	PT 1999-949001	19991015
ES 2191466	T3	20030901	ES 1999-949001	19991015
RU 2232769	C2	20040720	RU 2001-114207	19991015
US 6166002	A	20001226	US 1999-422146	19991020
ZA 2001003106	A	20020604	ZA 2001-3106	20010417
IN 2001CN00570	A	20050304	IN 2001-CN570	20010424
PRAI DE 1998-19849722	A	19981028		
WO 1999-EP7828	W	19991015		
OS CASREACT 132:308547; MARPAT 132:308547				
GI				

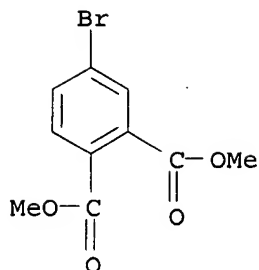
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to substituted Ph alkenoyl guanidines I [T1, T2 = (CRARB)xCRF:CRE(CRCRD)yCON:C(NH2)2, H; z = Z1; RA, RB, RC, RD = H, F, Cl, Br, I, CN, OH, NH2, C1-8-alkyl, O-C1-8-alkyl, O-C1-8-fluoroalkyl, C3-8-cycloalkyl, Ph, CH2Ph, NHR7, NR7R8, O-C3-6-alkenyl, O-C3-8-cycloalkyl, OPh, OCH2Ph; R7, R8 = H, C1-8-alkyl, C1-8-fluoroalkyl, C3-8-cycloalkyl, Ph, CH2Ph; R7R8 = (CH2)4, (CH2)5 or one CH2 is replaced with O, S, NH, NMe, NCH2Ph; R9, R10 = H, C1-4-alkyl, C1-4-perfluoroalkyl; x, y = 0 - 2; RE, RF = H, F, Cl, Br, I, CN, C1-8-alkyl, O-C1-8-alkyl, O-C1-8-fluoroalkyl, C3-8-cycloalkyl, O-C3-6-alkenyl, O-C3-8-cycloalkyl, OPh, OCH2Ph; R1, R2, R3 = H, F, Cl, Br, I, CN, C1-8-alkyl, O-C1-8-alkyl, O-C1-8-fluoroalkyl, CON:C(NH2)2, S-C1-8-alkyl, SO-C1-8-alkyl, SO2-C1-8-alkyl, SO2NR7R8, O-CO-8-alkylenephenyl, L = O, NR47, C1-8-alkylene, C2-8-alkenylene, C2-8-alkynylene, CO2, CONR47, SO2NR47, O(CH2)nO, N(R47)(CH2)nO, NR48CO(CH2)nO, CON(R48)(CH2)nO, OC(:O)(CH2)nO, SO2NR48(CH2)2O, (CH2)nO, NR48SO2(CH2)nO, etc.; one of R40 - R45 = bond to guanidine link; R47 = H, C1-8-alkyl, R48CO, Ph, CH2Ph; R48 = H, C1-8-alkyl, Ph, CH2Ph; n = 1 - 8; K = OR50, NHR50, N(R50)2, NHCH2CH2CO2H, NHCH2CH2SO3H, NHCH2CO2H, NMeCH2CO2H, NHCHR46CO2H, etc.] and pharmaceutically acceptable salts. Thus, II was prepared via coupling of cholic acid derivative III with bromobenzene derivative IV. Compds. I are, for instance, suitable for use as medicaments for the prophylaxis or treatment of gall stones; II was tested for inhibition of sodium/proton exchange (subtype 3; IC50 = 1.7 µM/L).

IT 87639-57-4, 4-Bromophthalic acid dimethyl ester  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and use of bile acid substituted Ph alkenoyl guanidines as medicaments or diagnostic agents)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 23 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2000:166114 CAPLUS  
DN 132:229558  
TI Heat development photographic material using chemically sensitized silver  
halide and image formation  
IN Kimura, Sok Man Ho.  
PA Konica Co., Japan  
SO Jpn. Kokai Tokkyo Koho, 40 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

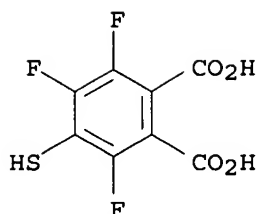
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000075438	A	20000314	JP 1998-243399	19980828
PRAI	JP 1998-243399		19980828		

AB The title photog. material possesses, on a support, a photosensitive layer containing organic Ag salts, binders, and photosensitive Ag halides which have been subjected to  $\geq 1$  chemical sensitization selected from S-, Se-, and Te-sensitization in the presence of  $\geq 1$  compound R21SmR22 (R21, R22 = aliphatic, aromatic or heterocyclic group, R21 and R22 may link each other to form a ring along with Sm; m = 2-6). To the material may be added a compound AlqYA2nA3r [A1 = SO3M, CO2M, OM (M = H, metal atom, quaternary ammonium, phosphonium); A2 = electron-attracting group; A3 = S-, Se- or Te-containing functional group capable of binding to Ag+; Y = aliphatic, aromatic or heterocyclic group; q, n = 1-10; r = 1 or 2] after  $\geq 1$  chemical sensitization selected from S-, Se- and Te-sensitization. An imaging method is also claimed, in which the material is exposed by using lasers. The material shows high sensitivity and storage stability and provides high contrast and low fog images with improved storage stability.

IT 112056-11-8  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(heat-developable photog. film using silver halide chemical sensitized in presence of sulfur compound)

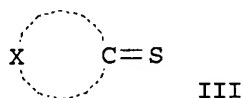
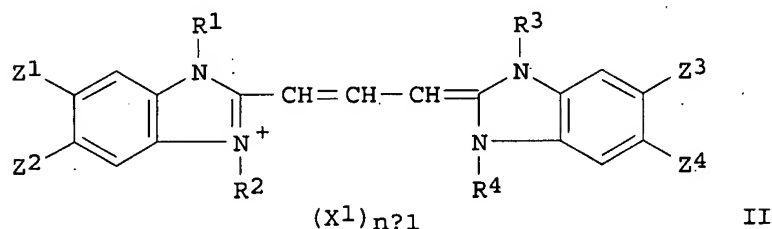
RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



LS ANSWER 24 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2000:129601 CAPLUS  
 DN 132:187575  
 TI Silver halide photographic material useful as medical x-ray film  
 IN Kimura, Sok Man Ho  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, 43 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000056420	A	20000225	JP 1998-223038	19980806
	JP 3780711	B2	20060531		
PRAI	JP 1998-223038		19980806		
OS	MARPAT 132:187575				
GI					



AB In the title photog. material possessing Ag halide emulsion layers on a support, the Ag halide grains, contained in  $\geq 1$  of the emulsion layers, are prepared in such a manner that the grain growth is carried out while the salt-containing aqueous solution is being removed from the reactant solution

properly by ultrafiltration and chemical-sensitized with  $\geq 1$  compound R11R12AuR13R14 [I; R11, R14 = (substituted) aliphatic hydrocarbon, aromatic hydrocarbon, heterocycle; R12, R13 = SO<sub>2</sub>S, Sm, Sem, Tem; m = 1-6]. The material may contain the Ag halide grains prepared by the above method in  $\geq 1$  of the emulsion layers and  $\geq 1$  compound II [R1, R3 = (substituted) lower alkyl, alkenyl; R2, R4 = alkyl,  $\geq 1$  of R2 and R4 is a hydrophilic group-substituted alkyl; Z1-4 = H, substituent; X1 = ion required to neutralize the charge in the mol.; n = 1 or 2, when an inner salt is formed, n = 1] in  $\geq 1$  layer of the material. The above chemical sensitization using  $\geq 1$  compound I may be carried out in the presence of  $\geq 1$  compound II. The material may contain, in  $\geq 1$

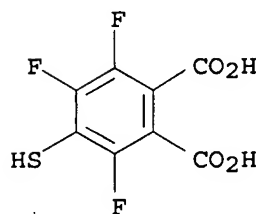
of the emulsion layers, the Ag halide grains which are prepared by the above method and contain  $\geq 1$  compound III [X = atoms having  $\geq 1$  selected from SO<sub>3</sub>M, CO<sub>2</sub>M, and OM directly or indirectly and being capable of forming a heterocycle; M = H, metal atom, quaternary ammonium, phosphonium, this compound has no partial structure NHC(:S)NR (R = H or substituent)], Al<sub>m</sub>YA<sub>2n</sub>A<sub>3r</sub> or Al<sub>m</sub>Y<sub>1</sub>A<sub>2n</sub>A<sub>3r</sub>-1ZpY<sub>2</sub>A<sub>1</sub>'m'A<sub>2</sub>'n'A<sub>3</sub>'r-1 [A<sub>1</sub>, A<sub>1</sub>' = SO<sub>3</sub>M<sub>1</sub>, CO<sub>2</sub>M<sub>1</sub>, OM<sub>1</sub> (M<sub>1</sub> = H, metal atom, quaternary ammonium, phosphonium); A<sub>2</sub>, A<sub>2</sub>' = electron-attracting group; A<sub>3</sub>, A<sub>3</sub>' = S-, Se- or Te-containing functional group capable of bonding to Ag<sup>+</sup>; Y, Y<sub>1</sub>, Y<sub>2</sub> = aliphatic or aromatic hydrocarbon, heterocycle; Z = S, Se, Te; m, n, m', n' = 1-10 (m + m' and n + n' in the later compound are  $\geq 1$ ); r, p = 1 or 2]. The material shows low fog, high sensitivity, decreased residual color stain, and improved storage stability.

IT 112056-11-8

RL: DEV (Device component use); MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (photog. emulsion containing fog inhibitor)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 25 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:115232 CAPLUS

DN 132:173319

TI Silver halide photographic emulsion

IN Natsume, Chizuko; Kondo, Akiya

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 49 pp.

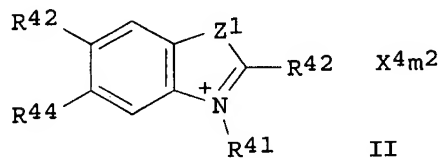
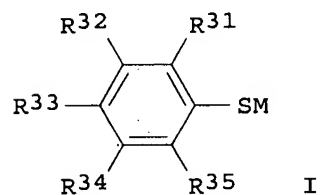
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000047344	A	20000218	JP 1998-223767	19980724
PRAI	JP 1998-223767		19980724		
OS	MARPAT 132:173319				
GI					



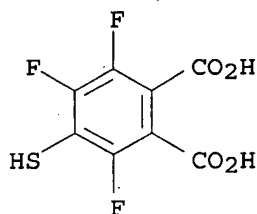
AB The title Ag halide emulsion contains Ag halide grains to which Ag nuclei are imparted and the both of intrinsic sensitivities of the inside and surface of the Ag halide grains are increased  $\geq 25\%$  than those of

the Ag halide grains to which Ag nuclei are not imparted. The emulsion may be added a compound [NR11R12C(:S)S-]m1(Man1+)m1/n1 (R11, R12 = H, aliphatic, aromatic or heterocyclic group, R11 and R12 may be atoms which link to form a 5- or 6-membered ring along with the N atom; Ma = cation; m1, n1 = 1-3), R21X21X22X23n2R22 (R21, R22 = aliphatic, aromatic or heterocyclic group, group having these groups; R21 and R22 may be atoms which link to form a ring; X21-23 = S, Se, Te; n2 = 1-4), I (R31-35 = H, substituent, ≥1 of R31-35 is an acidic group; M = H, cation) or II (R41 = aliphatic, aromatic or heterocyclic group; R42-44 = H, halo, aliphatic, aromatic or heterocyclic group, R41-44 may be atoms which link to form a ring in combination of R41 and R42 or R43 and R44; Z1 = O, S, Se, Te; X4 = counter ion; m2 = number required to control the charge of the mol.) and reduction-sensitized. The emulsion shows high sensitivity, low fog, and improved latent image stability and storage stability.

IT 112056-11-8  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (reduction sensitized photog. emulsion containing sulfur compound)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 26 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:48951 CAPLUS

DN 132:115146

TI X-ray image forming method and processing of silver halide photographic material

IN Marui, Toshiyuki

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000019666	A	20000121	JP 1998-199714	19980630
PRAI	JP 1998-199714		19980630		
OS	MARPAT 132:115146				

AB A Ag halide photog. material of which ≥1 emulsion layer containing tabular grains satisfying the following conditions is imagewise exposed by x-ray in contact with a radiog. intensifying screen having emission peak at 300-500 nm, developed, and then fixed. The conditions are; (1) having a spectral sensitivity peak at 300-500 nm; (2) with (111) principal plane, 1.0-4.0 μm circular diameter, and 0.2-0.6 μm thickness; (3) having a Ag halide protrusion with a face-centered cubic lattice structure, (4) the projection is positioned at the marginal area of the host tabular grain. The Ag halide grain may be chemical sensitized in the presence of a Se and/or a Te compound. The hydrophilic colloid layer may contain a compd.RSMY (R = water soluble group-substituted aliphatic, aromatic, heterocyclic, or alicyclic

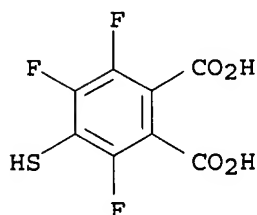
group; y = 1; 0; M = H, alkali metal, cation; when y = 0, R = S). The material shows high sensitivity and rapid processability, providing even images even being processed with less replenishment of a processing solution

IT 112056-11-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(hydrophilic colloid layer containing; X-ray image forming method and processing of silver halide photog. material)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 27 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:19490 CAPLUS

DN 132:85835

TI Method for processing silver halide photographic material

IN Mitsuhashi, Takeshi

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000002975	A	20000107	JP 1998-183289	19980616
PRAI	JP 1998-183289		19980616		

OS MARPAT 132:85835

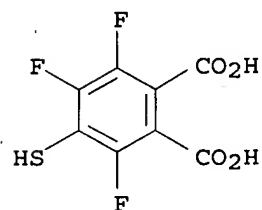
AB The method for processing a silver halide photog. material involves the photog. material having a light-sensitive silver halide emulsion layer containing silver halide grains of  $\leq 2\%$  AgI content and a hydrophilic layer containing compound R-S-M ( R = aliphatics, aroms., heterocyclics substituted with water soluble group; M = H, alkali metal, alkali metal cation ) or the thione of the R-S-M and a developing solution containing a reductone. The method provides the high sensitivity, the decreased development unevenness, and the superior silver tone.

IT 112056-11-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(method for processing silver halide photog. material)

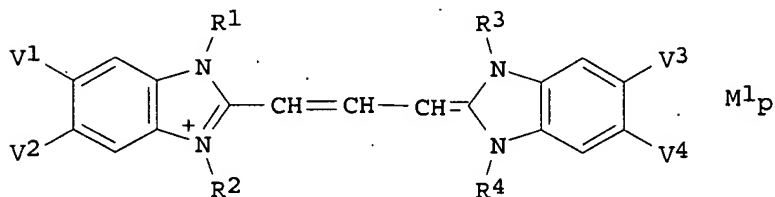
RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 28 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1999:813954. CAPLUS  
 DN 132:57050  
 TI Silver halide photographic emulsion, photographic material, photography  
 and processing method  
 IN Hoo, Sokuman; Kagawa, Nobuaki  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, 45 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

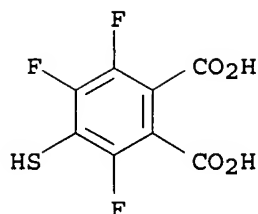
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11352622	A	19991224	JP 1998-157738	19980605
PRAI	JP 1998-157738		19980605		
OS	MARPAT 132:57050				
GI					



AB The emulsion contains Ag halide particles,  $\geq 1$  spectral sensitizer I  
 (R1-4 = aliphatic group, V1-4 = H, substituent;  $\geq 1$  of V1-4 = alkyl  
 having sulfo group;  $\geq 1$  of V1-4 = aromatic group; M1 = counter ion; m1  
 = number to neutralize the charge of the mol.) and  $\geq 1$  selected from  
 (MX)pArRfmYn, RfmYnArXxArRfm'Y'n', and X:ArRfmYn (Ar =aliphatic, aromatic,  
 heterocyclic group; Rf = electron-withdrawing group; Y, Y' = SO3M, CO2M,  
 OM, group having CO2M, OM, or SO3M; M = H, metal atom, quaternary  
 ammonium, phosphonium,; m, m' = 1-9; n, n' = 1-6; m + n  $\leq$  10; m' +  
 n'  $\leq$  10; p = 0, 1; X = S, Se, Te; x = 1-2). Photog. film using the  
 emulsion and x-ray photog. method using the film and a intensifying screen  
 with fluorescent material filling rate 68-90% are also claimed. The  
 material gives images with good storage stability and pressure resistance  
 even when processed rapidly and with low replenishment. The material is  
 developed and fixed while supplying solid processing agent to processing  
 solns. in each step. The material shows good pressure resistance and  
 gives images without color contamination even though processed rapidly and  
 using less processing solns.

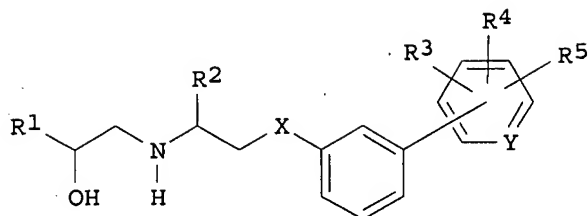
IT 112056-11-8  
 RL: DEV (Device component use); MOA (Modifier or additive use); TEM  
 (Technical or engineered material use); USES (Uses)  
 (radiog. emulsion containing benzimidazole derivative spectral sensitizer  
 and fog inhibitor)

RN 112056-11-8 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX  
 NAME)

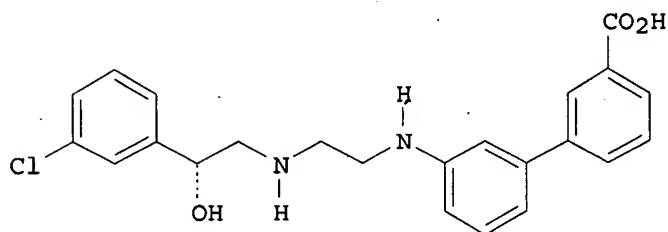


L5 ANSWER 29 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1999:811214 CAPLUS  
 DN 132:49890  
 TI Therapeutic biaryl derivatives useful as beta-3 adrenoceptor agonists  
 IN Donaldson, Kelly Horne; Shearer, Barry George; Uehling, David Edward  
 PA Glaxo Group Limited, UK  
 SO PCT Int. Appl., 69 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9965877	A1	19991223	WO 1999-EP3958	19990609
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2334713	A1	19991223	CA 1999-2334713	19990609
	CA 2334713	C	20060117		
	AU 9945103	A	20000105	AU 1999-45103	19990609
	AU 753004	B2	20021003		
	BR 9911182	A	20010313	BR 1999-11182	19990609
	EP 1087943	A1	20010404	EP 1999-927923	19990609
	EP 1087943	B1	20050817		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	TR 200100299	T2	20010621	TR 2001-200100299	19990609
	HU 200102668	A2	20011228	HU 2001-2668	19990609
	EE 200000744	A	20020415	EE 2000-744	19990609
	EE 4435	B1	20050215		
	JP 2002518374	T	20020625	JP 2000-554704	19990609
	JP 3471754	B2	20031202		
	NZ 508805	A	20030829	NZ 1999-508805	19990609
	AT 302189	T	20050915	AT 1999-927923	19990609
	ES 2245107	T3	20051216	ES 1999-927923	19990609
	AP 1687	A	20061231	AP 2001-2028	19990609
	W: GM, GH, KE, LS, MW, MZ, SL, SD, SZ, UG, ZW				
	TW 244471	B	20051201	TW 1999-88110054	19990616
	IN 2000KN00616	A	20050311	IN 2000-KN616	20001211
	NO 2000006319	A	20010209	NO 2000-6319	20001212
	NO 318782	B1	20050509		
	ZA 2000007417	A	20011212	ZA 2000-7417	20001212
	US 6251925	B1	20010626	US 2000-719595	20001213
	HR 2000000854	A1	20011231	HR 2000-854	20001213
	HR 2000000854	B1	20060531		
	HK 1034253	A1	20060120	HK 2001-104848	20010711
PRAI	GB 1998-12709	A	19980613		
	WO 1999-EP3958	W	19990609		



I



II

AB The invention relates to therapeutic biaryl derivs. I and pharmaceutically acceptable derivs. thereof [wherein R1 = Ph, naphthyl, pyridyl, thiazolyl, phenoxyethyl, or pyrimidyl, optionally substituted by one or more substituents selected from halo, OH, C1-6 alkoxy, C1-6 alkyl, NO2, cyano, CH2OH, CF3, NR6R6, and NHSO2R6; R2 = H or C1-6 alkyl; R3 = cyano, tetrazol-5-yl, or CO2R7; R4, R5 = (independently) H, C1-6 alkyl, CO2H, CO2-C1-6-alkyl, cyano, tetrazol-5-yl, halo, CF3, or C1-6 alkoxy; or R4R5 may form a fused 5- or 6-membered ring optionally containing one or two N, O, or S atoms; R6 = (independently) H or C1-4 alkyl; R7 = H or C1-6 alkyl; X = O, S, NH, or N-C1-4-alkyl; Y = N or CH]. The invention also relates to processes for preparation of I, and use of I in the treatment of diseases susceptible to amelioration by treatment with a beta-3 adrenoceptor agonist. Examples include preps. of over 70 intermediates, 26 example compds. and some salts, and approx. 20 formulations. For instance, reductive alkylation of 3'-amino-[1,1'-biphenyl]-3-carboxylic acid Me ester with a corresponding BOC- and TBDMS-protected aldehyde, followed by deprotection with HCl in aqueous dioxane, and alkaline hydrolysis of the Me ester,

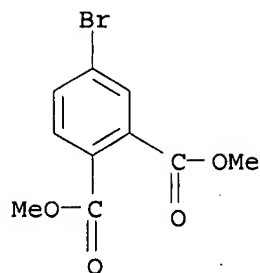
gave title compound II. In a cell culture assay of beta receptor subtypes, II had an EC50 of  $\leq 1$  nM for h $\beta$ 3 receptors, and  $> 300$ -fold selectivity for h $\beta$ 3 over h $\beta$ 2 and h $\beta$ 1 subtypes.

IT 87639-57-4P, Dimethyl 4-bromophthalate

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(intermediate; preparation of biaryl derivs. as  $\beta$ 3-adrenoceptor agonists)

RN 87639-57-4 CAPLUS

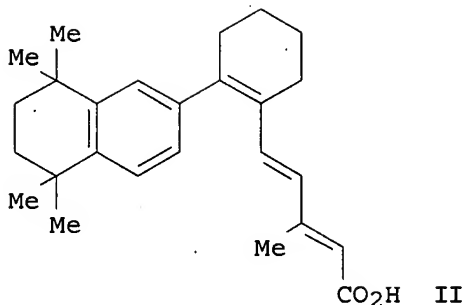
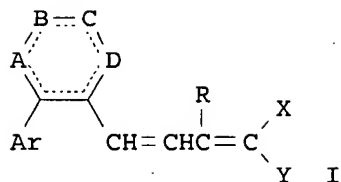
CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 30 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1999:670110 CAPLUS  
DN 131:286668  
TI Preparation of 9-cis-retinoic acid analogs for increasing HDL levels  
IN Epstein, Joseph William; Qing, Feng Ling; Birnberg, Gary Harold; Gilbert, Adam Matthew  
PA American Cyanamid Company, USA  
SO U.S., 22 pp., Cont.-in-part of U.S. Ser. No. 359,141.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5968908	A	19991019	US 1995-542146	19951114
	IL 116259	A	20000716	IL 1995-116259	19951206
	CA 2165374	A1	19960620	CA 1995-2165374	19951215
	AU 9540438	A	19960627	AU 1995-40438	19951215
	AU 690772	B2	19980430		
	JP 08291094	A	19961105	JP 1995-327423	19951215
	FI 9506086	A	19960620	FI 1995-6086	19951218
	EP 718285	A2	19960626	EP 1995-309171	19951218
	EP 718285	A3	19960807		
	EP 718285	B1	20010411		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	HU 74007	A2	19961028	HU 1995-3627	19951218
	ZA 9510757	A	19970618	ZA 1995-10757	19951218
	BR 9505938	A	19971223	BR 1995-5938	19951218
	CN 1176248	A	19980318	CN 1995-113178	19951218
	EP 997455	A1	20000503	EP 2000-101311	19951218
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV				
	AT 200481	T	20010415	AT 1995-309171	19951218
	TW 414790	B	20001211	TW 1996-85100119	19960106
	CN 1320599	A	20011107	CN 2000-128089	20001201
PRAI	US 1994-359141	A2	19941219		
	US 1995-542146	A	19951114		
	EP 1995-309171	A3	19951218		
OS	MARPAT 131:286668				
GI					

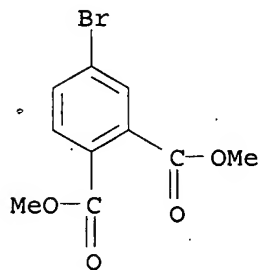


AB Novel analogs of 9-cis-retinoic acid I [Ar = (substituted) Ph, (substituted) tetrahydronaphthyl, (substituted) dihydroisobenzofuranyl; A, B, C = CH, CH<sub>2</sub>, O, S; D = (CH)<sub>m</sub>, (CH<sub>2</sub>)<sub>n</sub>; m = 0, 1; n = 0-2; R = H, Me, Et, tert-Bu, CF<sub>3</sub>; X = CH<sub>2</sub>OH, CHO, (substituted) CO<sub>2</sub>H, CN, CH<sub>2</sub>CONH<sub>2</sub>, tetrazol-5-yl; Y = H; XY = thiazolidinedionylidene], which are useful for the treatment and prevention of coronary artery disease and to protect against premature atherosclerosis by increasing HDL levels, are prepared. Thus, addition of 2-bromo-5,6,7,8-tetrahydro-5,5,8,8-tetramethylnaphthalene to Et 2-trifluoromethanesulfonyloxycyclohexen-1-ylcarboxylate, followed by the addition of Et 3-methyl-4-oxocrotonate gave the Et ester of II. II showed a potency of >5 times that of 9-cis-retinoic acid in its ability to bind to apolipoprotein.

IT 87639-57-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of 9-cis-retinoic acid analogs for increasing HDL levels)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)

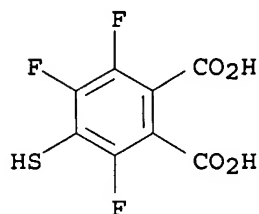


RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 31 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1999:498626 CAPLUS  
DN 131:163423  
TI Photothermographic material containing sensitized photosensitive silver halide and recording method  
IN Takiguchi, Hideki  
PA Konica Co., Japan  
SO Jpn. Kokai Tokkyo Koho, 32 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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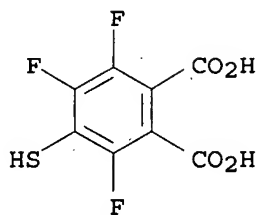
PI JP 11218876 A 19990810 JP 1998-33644 19980130  
 PRAI JP 1998-33644 19980130  
 OS MARPAT 131:163423  
 AB The material comprises a support having thereon a photosensitive layer containing at least a photosensitive Ag halide sensitized in the presence of a compound with an ammonium ion group, an adsorptive group on a Ag halide, and an unstable chalcogen atom site, an organic Ag halide, a reducing agent, and a binder. The material is exposed (to laser) for  $\leq 10^{-2}$  s and developed by heating at 80-250°. The material shows improved storage stability for a long period before and after heat development giving images, especially, black and white.  
 IT 112056-11-8  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (photothermog. material containing photosensitive silver halide sensitized by unstable chalcogen-containing ammonium compound)  
 RN 112056-11-8 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 32 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1999:498625 CAPLUS  
 DN 131:177407  
 TI Photothermographic material containing sensitized photosensitive silver halide and recording method  
 IN Takiguchi, Hideki  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, 32 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

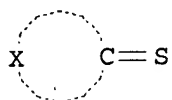
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11218875	A	19990810	JP 1998-33643	19980130
PRAI	JP 1998-33643		19980130		

OS MARPAT 131:177407  
 AB The material comprises a support having thereon a photosensitive layer containing at least a photosensitive Ag halide sensitized in the presence of a compound with meso-ion group and an unstable chalcogen atom site, an organic Ag halide, a reducing agent, and a binder. The material is exposed (to laser) for  $\leq 10^{-2}$  s and developed by heating at 80-250°. The material shows improved storage stability for a long period before and after heat development giving images, especially, black and white.  
 IT 112056-11-8  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (photothermog. material containing silver halide sensitized in presence of meso ion- and unstable chalcogen-containing compound with improved storage stability)  
 RN 112056-11-8 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)

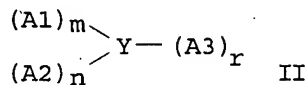


L5 ANSWER 33 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1999:472037 CAPLUS  
 DN 131:163301  
 TI Heat-developable photographic material with improved developed image stability  
 IN Ho, Sokuman  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, 29 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

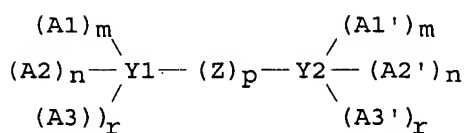
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11202444	A	19990730	JP 1998-6559	19980116
PRAI	JP 1998-6559		19980116		
OS	MARPAT 131:163301				
GI					



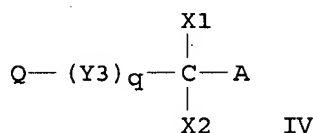
I



II



III

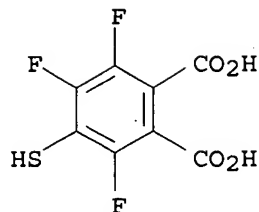


IV

AB The title photog. material contains I (X = atoms forming heterocycle containing -SO<sub>3</sub>M, -XOOM and/or -OM; M = H, metal, quaternary ammonium, phosphonium), II or III (A<sub>1</sub>, A<sub>1</sub>' = -SO<sub>3</sub>M, -COOM, -OM; M = H, metal, quaternary ammonium, phosphonium; m = 1-10; A<sub>2</sub>, A<sub>2</sub>' = electron withdrawing group; n = 1-10; A<sub>3</sub>, A<sub>3</sub>' = function group containing S, Se, or Te; r = 0, 1; Y, Y<sub>1</sub>, Y<sub>2</sub> = aliphatic, aromatic, heterocyclyl; Z = S, Se, Te; p = 1, 2). The material may contain addnl. IV (Q = aryl, heterocyclyl; X<sub>1</sub>, X<sub>2</sub> = halo; Y<sub>3</sub> = CO, SO, SO<sub>2</sub>; A = H, halo, electron withdrawing group; q = 2-6). The material shows reduced fog, improved color tone, storage stability, and developed image stability.

IT 112056-11-8  
 RL: DEV (Device component use); USES (Uses)  
 (in heat-developable photog. material with improved developed image stability)

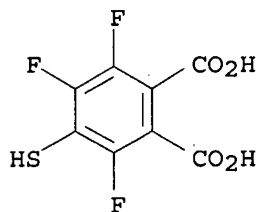
RN 112056-11-8 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 34 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1999:449206 CAPLUS  
 DN 131:136833  
 TI Photothermographic copying material using silver halide sensitized with gold compound  
 IN Takiguchi, Hideki  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, 36 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11194447	A	19990721	JP 1997-368955	19971226
	JP 3777770	B2	20060524		
PRAI	JP 1997-368955		19971226		

OS MARPAT 131:136833  
 AB The title material contains a photosensitive Ag salt which has been chemical sensitized in the presence of an organic Au compound, an organic Ag salt, a reducing agent, and a binder on a support. An imaging method is also claimed, in which the material is recorded by exposure for 10-2 s followed by heat treatment at 80-250°. The material shows high sensitivity and improved storage stability before and after heat development.  
 IT 112056-11-8  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (photothermog. copying material using silver halide sensitized with gold compound)  
 RN 112056-11-8 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 35 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1999:370132 CAPLUS  
 DN 131:51981  
 TI Silver halide photographic material for X-ray photography  
 IN Goan, Kazuyoshi  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, 40 pp.  
 CODEN: JKXXAF

DT Patent  
LA Japanese  
FAN.CNT 1

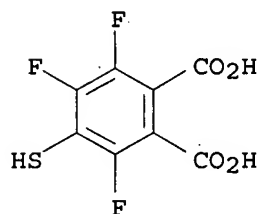
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11153842	A	19990608	JP 1998-261579	19980916
	US 6127109	A	20001003	US 1998-151160	19980910
PRAI	JP 1997-252077	A	19970917		

AB The silver halide photog. material has hydrophilic colloid layers including a silver halide emulsion layer on a support, wherein the colloid layer has silver halide particles; (a) of which  $\geq 50\%$  in the total projection area has  $\geq 70\%$  of silver iodide in the total silver halide particles in the  $\geq 70\%$  outside of the complete particle volume; (b) of which halide composition between particles in the uppermost layer is  $\leq 20\%$ ; and (c) of which shape is tabular with aspect ratio 3-15 and also has a sulfur compound having a hydrophilic substitute. The photog. material is suited for rapid processing without often refilling process solns. while showing the low-fogging and the high sensitivity.

IT 112056-11-8  
RL: TEM (Technical or engineered material use); USES (Uses)  
(sulfur compound for silver halide photog. material)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 36 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:340969 CAPLUS

DN 131:37878

TI Silver halide photographic material chemically sensitized with chalcogenide, its treatment, and its x-ray imaging

IN Kashiwagi, Kanji

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 69 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11143005	A	19990528	JP 1997-307061	19971110
PRAI	JP 1997-307061		19971110		

AB The photog. material is characterized (1) that  $\geq 1$  of photog. emulsion layers is chemical sensitized with a compound having (a) a water-soluble group, (b) a group adsorbable to Ag halides, and (c) a labile chalcogenide group in a mol., and (2) that the emulsion layer(s) or other hydrophilic colloid layer contain (d) a heterocyclic compound having thioketo group (other than cyclic thiourea derivative), (e) a disulfide compound, and/or (f) a mercapto compound. Also claimed is the method for processing the material using an automatic processor and a solid chemical kit. Further claimed is diagnostic x-ray imaging of the above material sandwiched between a pair of fluorescent paper sheets. The material showing improved speed/fog

relation can be processed by erythorbic acid developer solution without hydroquinone at higher speed.

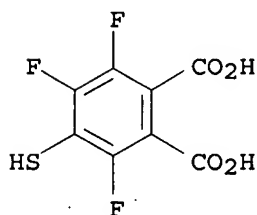
IT 112056-11-8

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(development and x-ray imaging of silver halide photog. material chemical sensitized with chalcogenide)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 37 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:260816 CAPLUS

DN 130:330530

TI Silver halide photographic material and its photographic method and processing

IN Takiguchi, Hideki

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 54 pp.

CODEN: JKXXAF

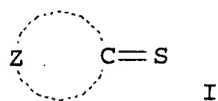
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11109545	A	19990423	JP 1997-275701	19971008
PRAI	JP 1997-275701		19971008		

GI



AB The title material, possessing hydrophilic colloid layers including  $\geq 1$  Ag halide emulsion layer on a support, contains (1) tabular Ag halide grains which can form development-beginning point at the vertexes (corners) of the grains and in the vicinity of them in the emulsion layer and (2)  $\geq 1$  compound selected from I [Z = atoms required to form a 5- to 6-membered N-containing heterocycle having  $\geq 1$  of SO3M1 or CO2M2 (M1, M2 = H, alkali metal, ammonium, phosphonium) directly or indirectly, the heterocycle has no partial structure NHC(:S)NR1 (R1 = H or substituent)], AlmYA2nA3r, and AlmYA2nA3r-1X2YA1'mA2'nA3'r-1 [A1, A1' = SO3M1, CO2M2; A2, A2' = electron-attracting group; A3, A3' = functional group containing S or Se capable of binding to Ag ion; m, n = 1-10; r = 1 or 2; Y = aliphatic or aromatic

hydrocarbon; X = S or Se] in the colloid layers. The material is imagewise exposed and processed continuously by using an automatic processor in which the total processing time is 5-30 s. In the process, solid processing agents may be supplied in the processing solns. in the

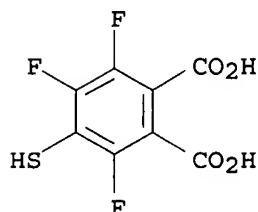
each step. A dihydroxybenzene-free developing solution containing a compound R13C(:Y1)CR11:CR12R14 (R11, R12 = OH, amino, acylamino, alkylsulfonylamino, arylsulfonylamino, alkoxycarbonylamino, SH, alkylthio; R13, R14 = OH, CO2H, alkoxy, hydroxyalkyl, carboxyalkyl, sulfo, sulfoalkyl, amino, aminoalkyl, SH, alkyl, aryl, R13 and R14 may be atoms linking to form a 5- to 8-membered ring along with the 3 C atoms; Y1 = :O, :NR15; R15 = H, OH, alkyl, acyl, hydroxyalkyl, sulfoalkyl, carboxyalkyl) may be used in the developing process. A photog. method is also claimed, in which the material is sandwiched with a pair of intensifying screens which show  $\geq 45\%$  absorption toward x-ray with x-ray energy 80 kVp and in which the filling rate of fluorescent substance is  $\geq 68\%$  and the thickness of the fluorescent substance is 135-200  $\mu\text{m}$  and exposed to x-ray. The material shows high sensitivity and low fog and provides Ag images with neutral black image tone.

IT 112056-11-8

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)  
(radiog. film containing sulfur or selenium compound)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI). (CA INDEX NAME)



L5 ANSWER 38 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:209912 CAPLUS

DN 130:259492

TI Silver halide photographic emulsion, sensitive material with reduced dye stain, and exposing and processing methods

IN Ho, Sokuman

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

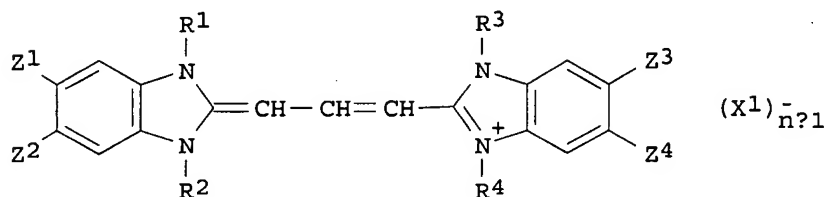
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11084570	A	19990326	JP 1997-256141	19970904
PRAI	JP 1997-256141		19970904		

GI



I

AB The Ag halide emulsion contains  $\geq 1$  selected from MXArFmQn (I) and FmQnArXxArFm'Qn' (II; Ar = aliphatic or aromatic hydrocarbons; Q = SO3M, CO2M,

OM; M = H, metal, quaternary ammonium salt, phosphonium; m or m' is >1 and <9; n or n' is >1 and <9; m + n ≤ 10; m' + n' ≤ 10; X = S, Se, Te; x = 1, 2). Silver halide grains contained in the emulsion containing I and/or II are reduction-sensitized and chemical sensitized with ≥1 of S, Se, and Te in the presence of ≥1 spectrally sensitizing dye III [R1, R3 = (un)substituted lower alkyl, alkenyl; R2, R4 = alkyl; Z1-4 = H, substituent; X = charge-neutralizing ion; n = 1, 2]. The sensitive material containing the emulsion is processed with solns. prepared by using solid processing agents in developing and fixing steps, wherein all processing steps including drying may be done by an instantaneously self-developing diffusion transfer system. The sensitive material sandwiched with an intensifying screen containing fluorescent material with 68-90% content is exposed to x-rays. The material shows low fog, high sensitivity, less dye stain, and improved antipressure marks.

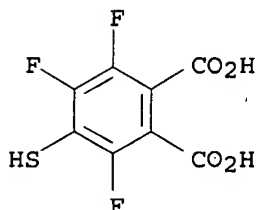
IT 112056-11-8

RL: MOA (Modifier or additive use); USES (Uses)

(in silver halide radiog. emulsion containing sensitizing dye with reduced dye stain)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 39 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:209911 CAPLUS

DN 130:274046

TI Silver halide photographic material containing sulfur compound and hydrazine derivative and processing thereof

IN Ishikawa, Wataru

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 44 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11084569	A	19990326	JP 1997-248462	19970912
PRAI	JP 1997-248462		19970912		
OS	MARPAT 130:274046				

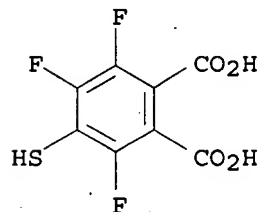
AB The title material, possessing ≥1 photosensitive Ag halide emulsion layer and ≥1 hydrophilic colloid layer on a support, contains ≥1 compound R1SmR2 or RSMY (R1, R2 = aliphatic, aromatic or heterocyclic group, atoms that link each other to form a ring; m = 2-6; R = water-soluble group-substituted aliphatic group or aromatic, heterocyclic or alicyclic group, y = 0 or 1, when y = 0, the RSMY is R:S; M = H, alkali metal, cation) in the emulsion layer and a hydrazine derivative in the emulsion layer and/or its adjacent non-photosensitive hydrophilic colloid layer. The material is imagewise exposed and processed by using an automatic processor in which the replenishment rates of the developing and fixing solns. are 50-150 and 100-300 mL/m<sup>2</sup> material, resp. The material for printing platemaking shows stable sensitivity, high dot quality, low fog, and little pepper fog even in continuous processing using low replenishment rates.

IT 112056-11-8

RL: DEV (Device component use); MOA (Modifier or additive use); TEM  
(Technical or engineered material use); USES (Uses)  
(photog. emulsion containing sulfur compound and hydrazine derivative)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX  
NAME)



L5 ANSWER 40 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:207364 CAPLUS

DN 130:274035

TI Silver halide emulsion, processing of photosensitive material using same,  
and photography of the material

IN Ho, Sokuman

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

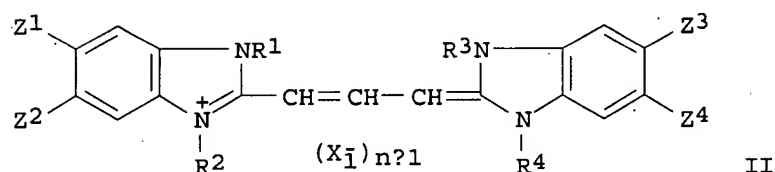
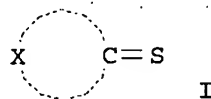
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11084556	A	19990326	JP 1997-242658	19970908
	EP 905558	A1	19990331	EP 1998-307192	19980907
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRAI	JP 1997-242658	A	19970908		

GI



AB The title emulsion contains reduction-sensitized Ag halide grains and a compound

I [X = atoms having  $\geq 1$  selected from SO<sub>3</sub>M, CO<sub>2</sub>M, and OM (M = H, metal atom, quaternary ammonium, sulfonium) directly or indirectly and forming a heterocycle, I excludes compds. having a structure NHC(:S)NR (R = H or substituent)], AlmYA2nA3r or AlmYA2nA3r-1ZpYA1'mA2'nA3'r-1 (A1, A1' = SO<sub>3</sub>M, CO<sub>2</sub>M, OM; A2, A2' = electron-attracting group, A3, A3' = functional group containing S, Se or Te atom capable of bonding to Ag<sup>+</sup>; m, n = 1-10, r = 1 or 2; Y = aliphatic or aromatic hydrocarbon, heterocycle; Z = S,

Se,

Te; p = 1 or 2) and is subjected to  $\geq 1$  selected from S-, Se-, and Te-sensitization in the presence of a spectrally sensitizing dye II [R1, R3 = (substituted) lower alkyl, (substituted) alkenyl; R2, R4 = alkyl,  $\geq 1$  of R2 and R4 is hydrophilic group-substituted alkyl; Z1-4 = H or substituent; X1- = ion required to neutralize the charge in the mol.; n = 1 or 2, when II forms an inner salt, n = 1]. The photosensitive material using the emulsion is continuously processed by a process including development and fixing steps while the solid processing agents are supplied to the processing solns. in the each step. The material sandwiched with intensifying screens, in which the filling rate of fluorescent substance is 68-90%, is subjected to x-ray photog. The material shows good photog. properties and pressure resistance even in rapid processing using a low replenishment rate.

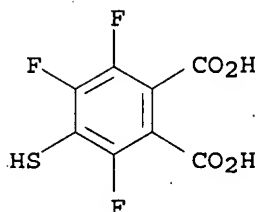
IT 112056-11-8

RL: DEV (Device component use); MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(reduction-sensitized photog. emulsion containing compound having carboxy or sulfonate group)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 41 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:157080 CAPLUS

DN 130:229933

TI Silver halide photographic material, photography, and processing thereof

IN Ho, Sokuman

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 44 pp.

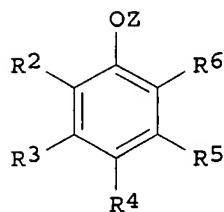
CODEN: JKXXAF

DT Patent

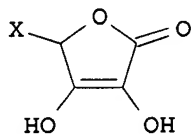
LA Japanese

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11065014	A	19990305	JP 1997-223555	19970820
PRAI	JP 1997-223555		19970820		
GI					



I



II

AB The title material, possessing a Ag halide emulsion layer on a support, is chemical sensitized in the presence of  $\geq 1$  compound RSMm (R = aliphatic,

aromatic, heterocyclic or alicyclic group substituted by water-soluble groups;

M

= H, alkali metal, cation; m = 0 or 1, when m = 0, the compound has the formula R:S) and contains a developing agent I (R2-6 = H or substituent, the total C number of R2-6 is  $\geq 8$  and  $\geq 1$  of R2 and R4 is OH, sulfonamide or carbonamide, R2-6 may form a ring along with OZ; Z = H or protective group which is released under alkali conditions to form OH) or II (X = aryl, heterocyclic group, CR11R12R13; R11-13 = H or substituent other than OH). The title processing method includes development, fixing, and drying steps, in which the total processing time is  $\leq 60$  s and the replenishment rate of the developing and fixing solns. is  $\leq 30$  cc/10 + 12 in. size. A photog. method is also claimed, in which the material sandwiched between high-sensitive intensifying screens in which the filling rate of the fluorescent substance is 68-90% is subjected to x-ray photograph. The material, useful as a medical x-ray film, shows low fog, high sensitivity, decreased residual color stain, and improved storage stability.

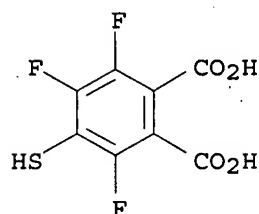
IT 112056-11-8

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(photog. emulsion chemical sensitized in presence of sulfur compound fog inhibitor)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 42 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:111844 CAPLUS

DN 130:189358

TI Silver halide photographic material, processing thereof, and x-ray image formation

IN Kashiwagi, Hiroshi

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp.

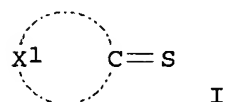
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11038547	A	19990212	JP 1997-195585	19970722
PRAI	JP 1997-195585		19970722		
GI					



I

AB The title material, possessing  $\geq 1$  photosensitive Ag halide emulsion

layer and hydrophilic colloid layers adjacent to the emulsion layer on a support, contains, in  $\geq 1$  layer selected from the emulsion layer and/or colloid layers, either  $\geq 1$  compound I [ $X_1$  = atoms required to form a heterocycle having  $\geq 1$   $SO_3M_1$  or  $CO_2M_1$  directly or indirectly along with the C atom in formula I;  $M_1$  = H, metal atom, quaternary ammonium, sulfonium; the compound has no partial structure  $NHC(:S)NR_1$  ( $R_1$  = H or substituent)],  $A_21mYA_22nA_23$  (II) or  $A_21mA_22nA_23r-1YZ_2YA'21mA'22nA'23r-1$  (III) [ $A_21, A'21 = SO_3M_21, CO_2M_21$  ( $M_21$  = H, metal atom, quaternary ammonium, phosphonium);  $m = 1-10$ ;  $A_22, A'22$  = electron-attracting group;  $n = 1-10$ ;  $A_23, A'23$  = functional group containing S or Se atom that can combine to Ag ion;  $r = 1$  or  $2$ ;  $Y$  = aliphatic or aromatic hydrocarbon;  $Z = S$  or  $Se$ ] or  $\geq 2$  compds. having different general formulas in I, II, and III. The material is imagewise exposed and processed by using an automatic processor in which solid processing agents are supplied to the each processing bath. The material is sandwiched by fluorescent intensifying screens and subjected to x-ray photog. The material shows high covering power and sensitivity, low fog, and improved storage stability.

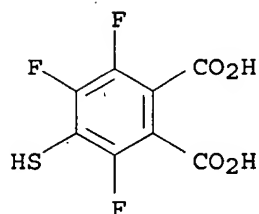
IT 112056-11-8

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(photog. emulsion showing high sensitivity and good storage stability)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 43 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:816682 CAPLUS

DN 130:117280

TI Silver halide photographic material containing mercapto compound and its processing method

IN Ho, Sokuman

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 37 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10339925	A	19981222	JP 1997-149282	19970606
PRAI	JP 1997-149282		19970606		

OS MARPAT 130:117280

AB The material comprising a support having thereon  $\geq 1$  photosensitive Ag halide emulsion layer with 0.01-2 mol% iodide content (based on the total particles) on the subsurface to the most outer surface, contains  $RSM_m$  ( $R$  = aliphatic group substituted with a water soluble group, aromatic, heterocyclic, alicyclic group;  $m = 1, 0$ ;  $M = H$ , alkali metal atom, cation; upon  $m = 0$ ,  $R = S$ ). The material may contain  $\geq 1$  benzimidazolocarboxyanine dye as spectral sensitizer. The material is continuously processed by an automatic developing apparatus in which a solid processing agent is provided. The material shows high sensitivity, low fog, high maximum d., less dye stain, and improved storage stability.

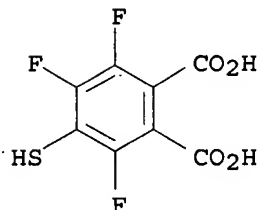
IT 112056-11-8

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(photog. film containing mercapto compound)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 44 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:781976 CAPLUS

DN 130:73782

TI Silver halide photographic material, its processing, and photographic method

IN Kashiwagi, Kanji

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 32 pp.

CODEN: JKXXAF

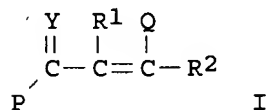
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10319531	A	19981204	JP 1997-128572	19970519
PRAI	JP 1997-128572		19970519		

GI



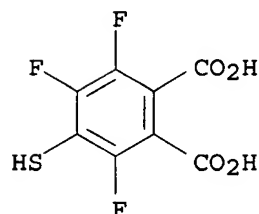
AB The material having hydrophilic colloid layers (A) including  $\geq 1$  photosensitive Ag halide emulsion layer (B), comprises as follows: (B) contains tabular grains (C) with 3-15 average aspect ratio in  $\geq 50\%$  of the total projection area; thiocyanate content on the surface of (C) is  $1 + 10^{-4} - 2 + 10^{-3}$  mol/Ag-mol; and (A) contains  $\geq 1$  RSMx (R = aliphatic, aromatic, or heterocyclic ring having water-soluble group; SMx = a group adsorbable to the Ag halide; M = H, alkali metal atom, cation; x = 0, 1; upon x = 0, M = cation). The material is processed after imagewise exposure by an automatic developing apparatus, to which a solid processing agent is applied. In the processing, a dihydroxybenzene-free developer containing I (R1, R2 = OH, amino, acylamino, alkylsulfonylamino, arylsulfonylamino, alkoxycarbonylamino, mercapto, alkylthio; P, Q = OH, CO2H, alkoxy, hydroxyalkyl, carboxyalkyl, sulfo, sulfoalkyl, amino, aminoalkyl, methylmercapto, alkyl, aryl, atoms to form 5- to 8-membered ring with two C atoms of a vinyl linked with R1 and R2 and C atom linked with Y; Y = O, :NR3; R3 = H, OH, alkyl, acyl, hydroxyalkyl, sulfoalkyl, carboxyalkyl) may be used. The material is exposed to x-rays, which is sandwiched with highly sensitive intensifying screens. The material shows high sensitivity, less fog, and improved storage stability at high temperature

IT 112056-11-8

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(photog. emulsion containing mercapto compound and silver halide tabular grains containing thiocyanate)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 45 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:682229 CAPLUS

DN 129:302552

TI Preparation of 1,4-disubstituted cyclic amine derivatives as serotonin antagonists

IN Kitazawa, Noritaka; Ueno, Kohshi; Takahashi, Keiko; Kimura, Teiji; Sasaki, Atsushi; Kawano, Koki; Okabe, Tadashi; Komatsu, Makoto; Matsunaga, Manabu; Kubota, Atsuhiko

PA Eisai Co., Ltd., Japan

SO PCT Int. Appl., 635 pp.

CODEN: PIXXD2

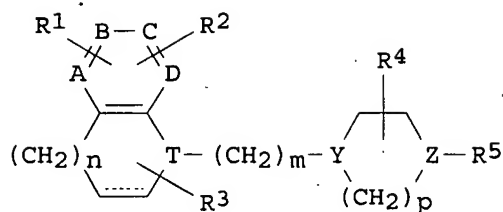
DT Patent

LA Japanese

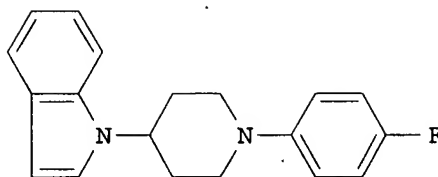
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9843956	A1	19981008	WO 1998-JP1481	19980331
W: AU, CA, CN, HU, JP, KR, MX, NO, NZ, RU, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
TW 242011	B	20051021	TW 1998-87104733	19980330
CA 2280753	A1	19981008	CA 1998-2280753	19980331
AU 9865209	A	19981022	AU 1998-65209	19980331
AU 748038	B2	20020530		
ZA 9802707	A	19991020	ZA 1998-2707	19980331
EP 976732	A1	20000202	EP 1998-911137	19980331
EP 976732	B1	20041124		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
HU 200000434	A2	20000628	HU 2000-434	19980331
NZ 337651	A	20020426	NZ 1998-337651	19980331
RU 2203275	C2	20030427	RU 1999-123039	19980331
AT 283259	T	20041215	AT 1998-911137	19980331
ES 2230681	T3	20050501	ES 1998-911137	19980331
US 6448243	B1	20020910	US 1999-367227	19990811
NO 9904720	A	19991130	NO 1999-4720	19990928
NO 314543	B1	20030407		
HK 1026700	A1	20050826	HK 2000-105871	20000919
US 2002086999	A1	20020704	US 2001-846259	20010502
US 7071201	B2	20060704		
US 2002019531	A1	20020214	US 2001-859517	20010518
US 6579881	B2	20030617		
PRAI JP 1997-98433	A	19970331		
JP 1997-366764	A	19971226		
WO 1998-JP1481	W	19980331		
US 1999-367227	A3	19990811		
OS MARPAT 129:302552				

GI



I



II

AB The title compds. (I; A, B, C, D, T, Y, and Z each represents a methine group or a nitrogen atom; R1, R2, R3, R4, and R5 each represents a substituent, such as halo, OH, hydroxyalkoxy, lower alkyl, etc.; n is an integer of 0 to 3; m is an integer of 0 to 6; and p is an integer of 1 to 3; dotted bond represents a single or double bond) are prepared I have serotonin antagonism and serve as drugs for the treatment, alleviation and prevention of spastic paralysis or a central muscle relaxant for alleviating myotonia. Thus, indoline was reacted with 1-(4-fluorophenyl)-4-piperidone in the presence of NaB(OAc)3 in AcOH and dichloroethane to give 63% the title compound (II), which showed binding activity of 623.94 and > 200 nM for 5HT1a and 5HT2 resp.

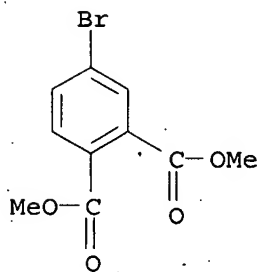
IT 87639-57-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 1,4-disubstituted cyclic amine derivs. as serotonin antagonists)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 46 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:656150 CAPLUS

DN 129:337559

TI Silver halide photographic material and its photography and processing

IN Ho, Sokuman

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10268459	A	19981009	JP 1997-73417	19970326

PRAI JP 1997-73417

19970326

OS MARPAT 129:337559

AB The title material possesses, on a support,  $\geq 1$  Ag halide emulsion layer containing Ag halide grains which are granulated in the presence of a Ag halide solvent and chemical sensitized in the presence of  $\geq 1$  compound R21SmR22 (R21, R22 = aliphatic or aromatic group, heterocyclic group, atoms required to form a ring; m = 2-6) and contain a compound RSM (R = aliphatic or aromatic group, heterocyclic group; M = H, alkali metal, cation) after chemical sensitization. The material may contain  $\geq 1$  benzimidazolocarbo-cyanine compound as a spectral sensitizer. The material is imagewise exposed and then processed by using an automatic processor of which the total processing time is 5-30 s. The material is sandwiched by high-sensitive intensifying screens and then subjected to x-ray photog. The material shows high sensitivity and Dmax, low fog and residual color stain, and good safelight property.

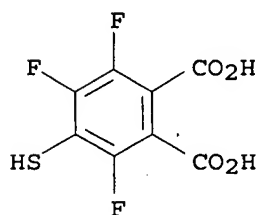
IT 112056-11-8

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(photog. emulsion containing silver halide solvent, disulfide and thiol compds.)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 47 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1997:326872 CAPLUS

DN 126:305581

TI Preparation of 6-(3-pyrazolecarbonyl)thiochroman derivatives as herbicides

IN Sakamoto, Masashi; Kamano, Hideki; Yamamoto, Hiroshi; Ikeda, Hidetsugu

PA Idemitsu Kosan Co., Ltd., Japan

SO PCT Int. Appl., 156 pp.

CODEN: PIXXD2

DT Patent

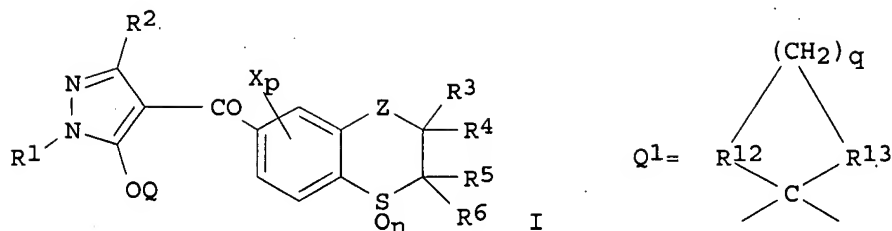
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9712885	A1	19970410	WO 1996-JP2879	19961003
	W:	AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	AU 9671452	A	19970428	AU 1996-71452	19961003
	EP 970956	A1	20000112	EP 1996-932810	19961003
	R:	DE, FR, GB			
	US 6159904	A	20001212	US 1999-276740	19990326
PRAI	JP 1995-257973	A	19951004		
	JP 1995-322030	A	19951211		
	WO 1996-JP2879	W	19961003		

OS MARPAT 126:305581

GI



AB Pyrazole derivs. represented by general formula [I; R1 = C1-4 alkyl, C2-4 (halo)alkenyl; R2 = H, C1-4 (halo)alkyl, C2-4 alkoxyalkyl; X = C1-4 (halo)alkyl, C2-4 alkoxyalkyl, halo, C1-4 (halo)alkoxy; p = 0,1,2; R3 - R6 = H, C1-4 alkyl, C1-4 haloalkyl, C2-4 alkoxyalkyl, halo; or R3 or R4 may form a bond with R5 or R6; n = 0,1,2; Q = H, A-B; wherein A = SO2, CO, (un)substituted CH2CO or CH2 and B = C1-12 alkyl, C3-10 cycloalkyl, substituted Ph; Z = CO, CS, substituted CH2, Q1; R12, R13 = O, S, CH2; q = 2-4] or their salts and aromatic carboxylic acid derivs. or their salts appropriate as intermediates for producing the pyrazole derivs. are prepared In both of soil and foliage treatments, the pyrazole derivs. or their salts make it possible to selectively control a wide variety of upland weeds such as grassy and broadleaf weeds at a low dosage without causing any chemical injury on upland crops such as corn. Thus, 6-carboxy-3,3,5,8-tetramethylthiochroman-4-one-1,1-dioxide (preparation given) was condensed with 1-ethyl-5-hydroxypyrazole using DCC in tert-amyl alc. at room temperature for 1 h and then heated at 80-90° in the presence of K2CO3 for 8 h to give 82% the title compound (II). II at 300 g/ha preemergence soil application controlled 100% Digitaria ciliaris, Echinochloa crus-galli, Xanthium pensylvanicum, and Abutilon theophrasti.

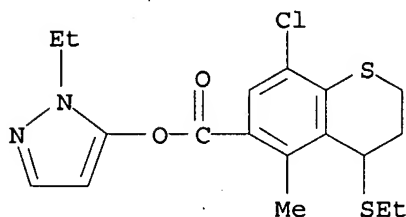
IT 189207-88-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (pyrazolecarbonyl)thiochroman derivs. and analogs as herbicides)

RN 189207-88-3 CAPLUS

CN 2H-1-Benzothiopyran-6-carboxylic acid, 8-chloro-4-(ethylthio)-3,4-dihydro-5-methyl-, 1-ethyl-1H-pyrazol-5-yl ester (9CI) (CA INDEX NAME)



L5 ANSWER 48 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1996:687361 CAPLUS

DN 125:328708

TI Preparation of pyrazole derivatives as herbicides

IN Shibata, Mitsuru; Sakamoto, Masashi; Kamano, Hideki; Yamamoto, Hiroshi

PA Idemitsu Kosan Co., Ltd., Japan

SO PCT Int. Appl., 118 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.

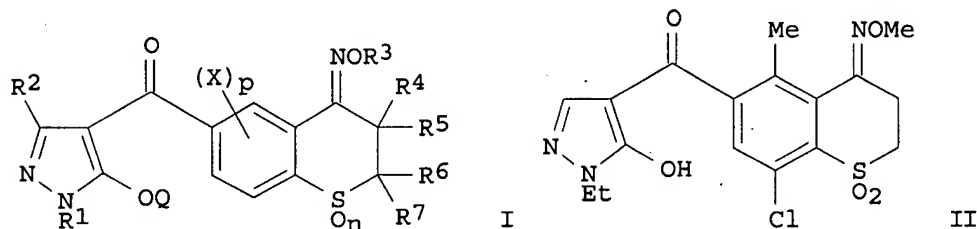
KIND

DATE

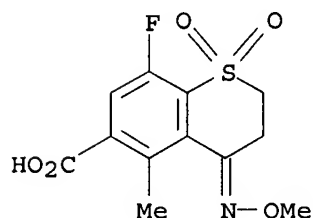
APPLICATION NO.

DATE

PI WO 9630368 A1 19961003 WO 1996-JP811 19960328  
 W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KR,  
 LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK,  
 TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,  
 IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,  
 MR, NE, SN, TD, TG  
 CA 2214854 A1 19961003 CA 1996-2214854 19960328  
 AU 9651206 A 19961016 AU 1996-51206 19960328  
 EP 818455 A1 19980114 EP 1996-907678 19960328  
 R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, PT  
 CN 1184477 A 19980610 CN 1996-193994 19960328  
 BR 9607749 A 19980623 BR 1996-7749 19960328  
 PRAI JP 1995-69760 A 19950328  
 JP 1995-158842 A 19950626  
 WO 1996-JP811 W 19960328  
 OS MARPAT 125:328708  
 GI



AB The title compds. I [R1 = alkyl, etc.; R2 = H, alkyl, etc.; X = alkyl, etc.; p = 0 - 2; R3 = alkyl, haloalkyl, etc.; R4 - R7 = H, alkoxyalkyl, etc.; n = 0 - 2; Q = H, etc.] are prepared I have a remarkably excellent crop-weed selectivity in both foliage and soil treatments. The title compound II (preparation given) at 300 g/ha gave complete control of *Setaria viridis*, *Xanthium strumarium*, etc., and caused no damage to corn.  
 IT 183238-00-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of pyrazole derivs. as herbicides)  
 RN 183238-00-8 CAPLUS  
 CN 2H-1-Benzothiopyran-6-carboxylic acid, 8-fluoro-3,4-dihydro-4-(methoxyimino)-5-methyl-, 1,1-dioxide (9CI) (CA INDEX NAME)

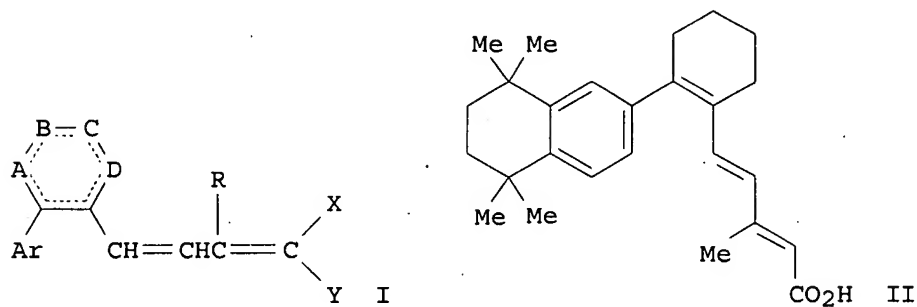


L5 ANSWER 49 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1996:476784 CAPLUS  
 DN 125:143084  
 TI Preparation of 9-cis-retinoic acid analogs for increasing HDL levels  
 IN Quing, Feng-Ling; Birnberg, Gary H.; Epstein, Joseph W.; Gilbert, Adam M.  
 PA American Cyanamid Company, USA  
 SO Eur. Pat. Appl., 53 pp.

CODEN: EPXXDW

DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 718285	A2	19960626	EP 1995-309171	19951218
	EP 718285	A3	19960807		
	EP 718285	B1	20010411		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
	US 5968908	A	19991019	US 1995-542146	19951114
	EP 997455	A1	20000503	EP 2000-101311	19951218
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV				
PRAI	US 1994-359141	A	19941219		
	US 1995-542146	A	19951114		
	EP 1995-309171	A3	19951218		
OS	MARPAT 125:143084				
GI					

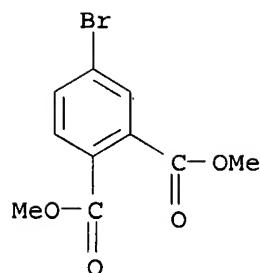


AB Novel analogs of 9-cis-retinoic acid I [Ar = (substituted) Ph, (substituted) tetrahydronaphthyl, (substituted) dihydroisobenzofuranyl; A, B, C = CH, CH<sub>2</sub>, O, S; D = (CH)<sub>m</sub>, (CH<sub>2</sub>)<sub>n</sub>; m = 0, 1; n = 0-2; R = H, Me, Et, tert-Bu, CF<sub>3</sub>; X = CH<sub>2</sub>OH, CHO, (substituted) CO<sub>2</sub>H, CN, CH<sub>2</sub>CONH<sub>2</sub>, tetrazol-5-yl; Y = H; XY = thiazolidinedionylidene], which are useful for the treatment and prevention of coronary artery disease and to protect against premature atherosclerosis by increasing HDL levels, are prepared. Thus, addition of 2-bromo-5,6,7,8-tetrahydro-5,5,8,8-tetramethylnaphthalene to Et 2-trifluoromethanesulfonyloxycyclohexen-1-ylcarboxylate, followed by the addition of Et 3-methyl-4-oxocrotonate gave the Et ester of II. II showed a potency of >5 times that of 9-cis-retinoic acid in its ability to bind to apolipoprotein.

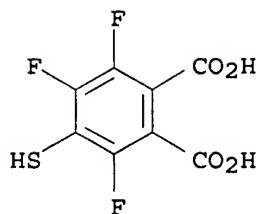
IT 87639-57-4P, Dimethyl 4-bromophthalate  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of 9-cis-retinoic acid analogs for increasing HDL levels)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 50 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1996:325183 CAPLUS  
 DN 125:48361  
 TI Studies on quinolone antibacterials. IV. Structure-activity relationships of antibacterial activity and side effects for 5- or 8-substituted and 5,8-disubstituted-7-(3-amino-1-pyrrolidinyl)-1-cyclopropyl-1,4-dihydro-4-oxoquinoline-3-carboxylic acids  
 AU Yoshida, Toshihiko; Yamamoto, Yoichi; Orita, Hitomi; Kakiuchi, Masato; Takahashi, Yoshie; Itakura, Masakazu; Kado, Noriyuki; Mitani, Kazuya; Yasuda, Shingo; et al.  
 CS Research and Development Division, Hokuriku Seiyaku Co., Ltd., Katsuyama, 911, Japan  
 SO Chemical & Pharmaceutical Bulletin (1996), 44(5), 1074-1085  
 CODEN: CPBTAL; ISSN: 0009-2363  
 PB Pharmaceutical Society of Japan  
 DT Journal  
 LA English  
 OS CASREACT 125:48361  
 AB A series of 7-(3-amino-1-pyrrolidinyl)-1-cyclopropyl-1,4-dihydro-4-oxoquinoline-3-carboxylic acids bearing various substituents (H, F, Cl, Me, OH, OMe, OEt, OCH<sub>2</sub>F, OCHF<sub>2</sub>, OCF<sub>3</sub>, SMe) at the C-8 position was prepared and evaluated for in vitro antibacterial activity against both standard laboratory strains and bacteria resistant to quinolones such as ciprofloxacin (CPFX) and ofloxacin (OFLX) from clin. isolates. The 8-Me, 8-fluoro, 8-chloro and 8-methoxy compds. were 4 times more potent than CPFX against both gram-pos. and gram-neg. bacteria. But these 4 compds. caused injury to the chromosomes of mammalian cells at a concentration of 100 µg/mL. Next, a series of quinolones having various substituents (H, Cl, Me, NH<sub>2</sub>, NHMe, NMe<sub>2</sub>) at the C-5 position was prepared and evaluated for antibacterial activity and injurious effect on the chromosome. We found that the 5-amino-8-Me compound showed strong bacterial activity (in vitro antibacterial activity 4 times more potent than that of CPFX against both gram-pos. and gram-neg. bacteria), reduced injury to the chromosome, and reduced quinolone-type toxicity (free from both phototoxicity at a dosage of 30 mg/kg in guinea pigs (i.v.) and convulsion-inducing activity when coadministered with fenbufen at a dosage of 100 mg/kg in mice (i.p.)).  
 IT 112056-11-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant; synthesis and antibacterial activity of  
 (aminopyrrolidinyl)cyclopropyloxoquinolinecarboxylic acids)  
 RN 112056-11-8 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 51 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1995:849949 CAPLUS  
 DN 124:9089  
 TI 1 $\alpha$ ,25-Dihydroxyvitamin D3 Analogs Featuring Aromatic and  
 Heteroaromatic Rings: Design, Synthesis, and Preliminary Biological  
 Testing  
 AU Posner, Gary H.; Li, Zhengong; White, M. Christina; Vinader, Victoria;  
 Takeuchi, Kazuhiro; Guggino, Sandra E.; Dolan, Patrick; Kensler, Thomas W.  
 CS School of Arts and Sciences, Johns Hopkins University, Baltimore, MD,  
 21218, USA  
 SO Journal of Medicinal Chemistry (1995), 38(22), 4529-37  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PB American Chemical Society  
 DT Journal  
 LA English  
 OS CASREACT 124:9089  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Aromatic compds. I (R = HO, HOCH<sub>2</sub>, HOCH<sub>2</sub>CH<sub>2</sub>), analogs of 1 $\alpha$ ,25-  
 dihydroxyvitamin (calcitriol), and heteroarom. compds. II (R = HO, HOCH<sub>2</sub>,  
 HOCH<sub>2</sub>CH<sub>2</sub>; X = O, S), analogs of 19-nor-1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub>,  
 were designed to simulate the topol. of their biol. potent parent compds.  
 while avoiding previtamin D equilibrium Convergent and facile total syntheses  
 of the analogs (+)-I (R = HOCH<sub>2</sub>, HOCH<sub>2</sub>CH<sub>2</sub>) and (-)-II (R = HOCH<sub>2</sub>; X = S,  
 O) were achieved via carbonyl addition of regiospecifically formed  
 organolithium nucleophiles to the enantiomerically pure C,D-ring ketone,  
 characteristic of natural calcitriol. Likewise, hybrid analogs were  
 prepared to determine whether incorporation of a known potentiating side chain  
 would lead to increased biol. activity. Preliminary in vitro biol.  
 testing showed that aromatic analogs as well as heteroarom. analogs have very  
 low affinities for the calf thymus vitamin D receptor but considerable  
 antiproliferative activities in murine keratinocytes at micromolar  
 concentration

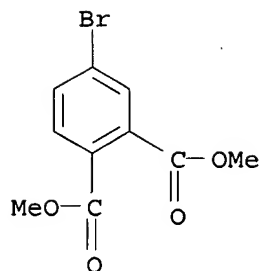
No biol. advantage was observed in this keratinocyte assay for the doubly  
 modified hybrid analogs over the singly modified parent (+)-II (R = HOCH<sub>2</sub>,  
 X = S). (+)-II (R = HOCH<sub>2</sub>, X = S) showed considerable activity in  
 nongenomic opening of calcium channels in rat osteosarcoma cells.

IT 87639-57-4, Dimethyl 4-bromophthalate

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (preparation and activity of 1 $\alpha$ ,25-dihydroxyvitamin D<sub>3</sub> analogs  
 featuring aromatic and heteroarom. rings)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX  
 NAME)



L5 ANSWER 52 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1994:324484 CAPLUS

DN 120:324484

TI Hardenable imide oligomers

IN Furuya, Hiroyuki; Ida, Junya; Nagano, Kosaku

PA Kanegafuchi Chemical Ind, Japan

SO Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

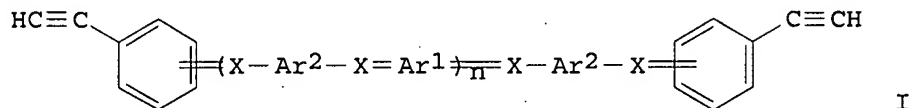
DT Patent

LA Japanese

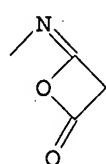
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 05339375	A	19931221	JP 1992-177335	19920610
PRAI	JP 1992-177335		19920610		

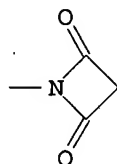
GI



I



II



III

AB The title oligomers giving cured products with high heat resistance, good mech. strength and dimensional stability, and low water-absorption, useful for laminates, varnishes, etc., have ethynyl-terminated structure I (Ar1 = tetravalent aromatic groups; Ar2 = divalent aromatic group, where  $\geq 2$  mol of Ar2 are C6H4CO2Ar3OCOC6H4; Ar3 = divalent aromatic groups; X = trivalent groups selected from II, III, and/or combination of NHCO and CO2H; n = 0-15). Thus, 3.22 g benzophenonetetracarboxylic dianhydride and 1.46 g 1,3-bis(3-aminophenoxy)benzene were treated with 2.23 g 2,2-bis(4-aminobenzoyloxyphenyl)propane in DMF at 80° for 2 h, with 1.07 g 3-ethynylphthalic anhydride and then with 11 mL Ac2O and 10 mL pyridine to obtain imide oligomer, which was hot pressed to give test pieces showing bending strength 42.6 kg/mm<sup>2</sup>, flexural modulus 315 kg/mm<sup>2</sup>, impact strength 435 kg-cm/cm<sup>2</sup>, glass transition temperature 253°, and water absorption 0.27%.

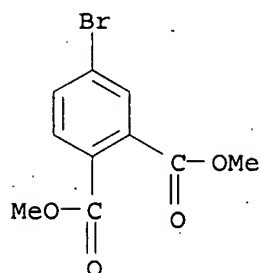
IT 87639-57-4P, Dimethyl 4-bromophthalate

RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and reaction of, for acetylenylphthalic acid, for polyimides)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX

NAME)



L5 ANSWER 53 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1992:132577 CAPLUS

DN 116:132577

TI Fire resistant hydraulic fluids

IN Bohlen, Joseph Michael; Tubbs, Paul

PA Atochem North America, Inc., USA

SO PCT Int. Appl., 118 pp.

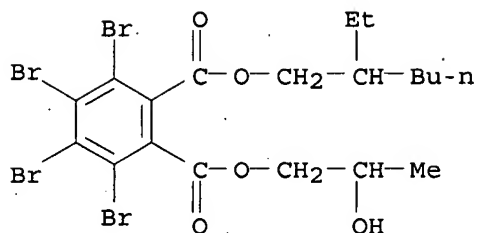
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9116389	A1	19911031	WO 1991-US2414	19910409
	W: AU, BB, BG, BR, CA, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	US 5328627	A	19940712	US 1990-508744	19900412
	AU 9178648	A	19911111	AU 1991-78648	19910409
	EP 477360	A1	19920401	EP 1991-909444	19910409
	EP 477360	B1	19950705		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	BR 9105711	A	19920804	BR 1991-5711	19910409
	JP 05501131	T	19930304	JP 1991-509134	19910409
PRAI	US 1990-508744	A	19900412		
	US 1988-258267	B2	19881014		
	WO 1991-US2414	A	19910409		
AB	The title fluid composition contains $\geq 1$ ester of a halogen-substituted aromatic acid (e.g., halophthalate ester) and $\geq 1$ shear-stable polymers in hydraulic fluids selected from mineral oils, poly- $\alpha$ -olefins, cycloaliph., alkylated aroms., esters of dibasic acids, silicones, silicate esters, polyol ester, polyglycol esters, phosphate esters, and other organohalides.				
IT	111043-72-2				
	RL: USES (Uses)				
	(in fire resistant hydraulic fluids)				
RN	111043-72-2 CAPLUS				
CN	1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-, 2-ethylhexyl 2-hydroxypropyl ester (9CI) (CA INDEX NAME)				



L5 ANSWER 54 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1991:558729 CAPLUS

DN 115:158729

TI Preparation of diphenylacetylenes by palladium-catalyzed coupling reaction of bromobenzene with acetylene

IN Bader, Axel; Arlt, Dieter

PA Bayer A.-G., Germany

SO Ger. Offen., 9 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3936297	A1	19910502	DE 1989-3936297	19891101
	US 5185454	A	19930209	US 1990-594265	19901002
	EP 425930	A2	19910508	EP 1990-120077	19901019
	EP 425930	A3	19920708		
	EP 425930	B1	19940928		
	R: BE, CH, DE, FR, GB, IT, LI				
	JP 03169827	A	19910723	JP 1990-287387	19901026
PRAI	DE 1989-3936297	A	19891101		

OS CASREACT 115:158729; MARPAT 115:158729

AB A process for the preparation of sym. diaryl acetylenes comprises the treatment of aryl halides in the liquid phase with HC.tplbond.CH in the presence of a Pd catalyst and a base. Thus, HC.tplbond.CH was blown into a mixture containing

4-BrC6H4CO2Et (343.5 g), (Ph3P)2PdCl2 (10.5 g), CuI (10.5 g), Ph3P (63 g), piperidine (600 mL) and MeCN (600 mL) at 80° to give 91% 4-EtO2CC6H4C.tplbond.CC6H6CO2Et-4.

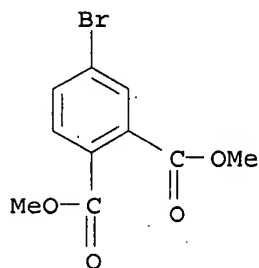
IT 87639-57-4, Dimethyl 4-bromo-1,2-benzenedicarboxylate

RL: RCT (Reactant); RACT (Reactant or reagent)

(coupling reaction of, with acetylene, palladium-catalyzed)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)

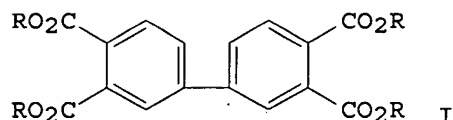


L5 ANSWER 55 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1990:552043 CAPLUS

DN 113:152043  
 TI The process for the preparation of 3,3',4,4'-biphenyltetracarboxylic acid and its derivatives  
 IN Ding, Mengxian; Wang, Xugiang; Yang, Zhengua; Zhang, Jing  
 PA Changchun Institute of Applied Chemistry, Peop. Rep. China  
 SO Eur. Pat. Appl., 7 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 363922	A2	19900418	EP 1989-118880	19891011
	EP 363922	A3	19920102		
	EP 363922	B1	19960410		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	CN 1041754	A	19900502	CN 1988-107107	19881011
	CN 1021439	B	19930630		
	US 5081281	A	19920114	US 1989-418059	19891006
	CA 2000426	A1	19900411	CA 1989-2000426	19891011
	JP 03068539	A	19910325	JP 1989-270547	19891011
	AT 136537	T	19960415	AT 1989-118880	19891011
PRAI	CN 1988-107107	A	19881011		
OS	MARPAT 113:152043				
GI					

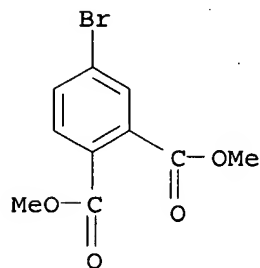


AB The title compds. (I; R = C1-6 alkyl), useful as materials for high-performance polyimides and curing agents for epoxy resins (no data), are prepd,. AcNMe2 was added to a mixture of di-Me 4-chlorophthalate, anhydrous NaBr, Zn powder, and (Ph3P)2NiCl2 (prepn.given) under N and the solution was heated at 60° to give 83% I (R = Me). Also prepared were 2 addnl. I (R = Bu, H). Also used catalyst was (Et3P)2NiCl2.

IT 87639-57-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (coupling of)

RN 87639-57-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 56 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1990:518220 CAPLUS  
 DN 113:118220  
 TI Fire-resistant hydraulic fluids

IN Bohen, Joseph Michael  
 PA Pennwalt Corp., USA  
 SO Eur. Pat. Appl., 56 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 363647	A2	19900418	EP 1989-116540	19890907
	EP 363647	A3	19900725		
	EP 363647	B1	19931215		
	R: BE, DE, ES, FR, GB, IT, NL, SE				
	CA 1337191	C	19951003	CA 1989-611070	19890912
	AU 8941415	A	19900426	AU 1989-41415	19890914
	JP 02209996	A	19900821	JP 1989-264072	19891012
	DD 299824	A5	19920507	DD 1989-333592	19891012
	DK 8905089	A	19900417	DK 1989-5089	19891013
	BR 8905219	A	19900515	BR 1989-5219	19891013
PRAI	US 1988-258267	A	19881014		

AB Fire-resistant hydraulic fluid compns. comprise (1)  $\geq 1$  polyhaloarom. acid esters alone or in combination with (2)  $\geq 1$  hydraulic fluids independently selected from mineral oil, poly- $\alpha$ -olefins, alkylated aroms., cycloaliphs., esters of dibasic acids, polyol esters, polyglycols, silicones, silicate esters, phosphate esters, and halogenated compns. other than (1). An example of the ester is dioctyl tetrabromophthalate.

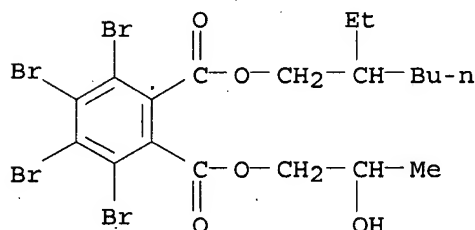
IT 111043-72-2

RL: USES (Uses)

(hydraulic fluids containing, fire-resistant)

RN 111043-72-2 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-, 2-ethylhexyl 2-hydroxypropyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 57 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1989:596080 CAPLUS

DN 111:196080

TI Tetrahalophthalate esters as flame retardants for certain resins

IN Bohen, Joseph Michael; Lovenguth, Ronald Francis

PA Pennwalt Corp., USA

SO PCT Int. Appl., 85 pp.

CODEN: PIXXD2

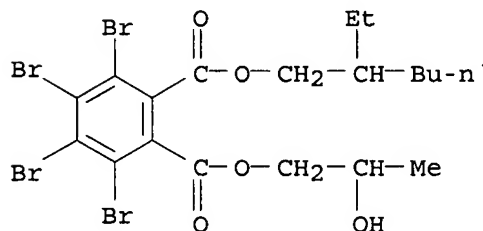
DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8903854	A1	19890505	WO 1988-US3839	19881028
	W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US				
	RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
	US 4762861	A	19880809	US 1987-115211	19871030

US 4938894	A	19900703	US 1987-115688	19871030
US 4912158	A	19900327	US 1988-173344	19880325
US 4923917	A	19900508	US 1988-173691	19880325
US 4954542	A	19900904	US 1988-173343	19880325
AU 8927854	A	19890523	AU 1989-27854	19881028
AU 6265332	B2	19920806		
BR 8807274	A	19891031	BR 1988-7274	19881028
JP 02502026	T	19900705	JP 1988-509179	19881028
DD 290203	A5	19910523	DD 1988-321372	19881102
IL 88294	A	19920621	IL 1988-88294	19881104
NO 8902684	A	19890628	NO 1989-2684	19890628
DK 8903235	A	19890629	DK 1989-3235	19890629
FI 8903189	A	19890629	FI 1989-3189	19890629
US 5086098	A	19920204	US 1990-622122	19901203
PRAI US 1987-115211	A2	19871030		
US 1987-115688	A2	19871030		
US 1988-173343	A2	19880325		
US 1988-173344	A2	19880325		
US 1988-173691	A2	19880325		
US 1988-244421	A2	19880916		
WO 1988-US3839	A	19881028		
US 1989-322035	B1	19890310		
AB	Tetrahalophthalate esters are used as flame retardants for a resin such as ABS polymer, polystyrene, polycarbonate, poly(butylene terephthalate), maleic anhydride-styrene copolymer, and (substituted) polyolefin. The resin composition containing a tetrahalophthalate ester shows improved flow characteristics. A composition of Cyclolac T (I) (ABS polymer) 100, 1,2-bis(2,4,6-tribromophenoxy)ethane 11, dioctyl tetrabromophthalate 17, and Sb303 4 parts was injection molded at 230° to give test specimens showing flame resistance UL-94 (0.125 in) rating V-0, whereas test specimens of I alone failed the test.			
IT	111043-72-2 RL: USES (Uses) (fireproofing agent, for polymers)			
RN	111043-72-2 CAPLUS			
CN	1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-, 2-ethylhexyl 2-hydroxypropyl ester (9CI) (CA INDEX NAME)			



L5	ANSWER 58 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN				
AN	1989:182845 CAPLUS				
DN	110:182845				
TI	Silver halide photographic material containing fluorine-containing inhibitor				
IN	Haraga, Hideaki; Ezaki, Atsuo; Iwamuro, Masao				
PA	Konica Co., Japan				
SO	Jpn. Kokai Tokkyo Koho, 22 pp. CODEN: JKXXAF				
DT	Patent				
LA	Japanese				
FAN.CNT 1					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 63144351	A	19880616	JP 1986-292964	19861208

PRAI JP 1986-292964

19861208

OS MARPAT 110:182845

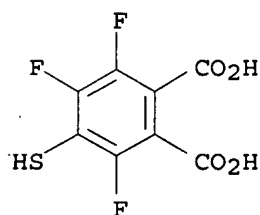
AB At least one of photosensitive Ag halide emulsion layers contains a compound (e.g. scavenger) which is reacted with an oxidized color developer and which gives no image d., and  $\geq 1$  of hydrophilic layers contains  $(F)mAr(Y)n$  or  $(F)m(Y)nArXAr(F)p(Y')q$  [Ar = benzene ring or naphthalene ring (containing quinone); Y, Y' = substituent; X = divalent connecting group; m, p = 1-5; n, q = 1-3; m + n  $\leq$  8; p + q  $\leq$  8]. The photog. material shows improved storage stability and prevented fogging. The photog. material provides excellent graininess and storage stability for the presence of scavengers.

IT 112056-11-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(photog. fog inhibitor, hydrophilic layer containing)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 59 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1989:144852 CAPLUS

DN 110:144852

TI Silver halide photographic material containing fluorine-containing inhibitor

IN Suzuki, Masatoyo; Ezaki, Atsuo; Iwamuro, Masao

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63199348	A	19880817	JP 1987-32993	19870216
PRAI	JP 1987-32993		19870216		

OS MARPAT 110:144852

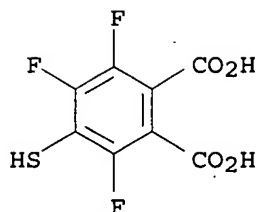
AB In the title photog. material comprising photog. constitutional layer having  $\geq 1$  Ag halide emulsion layer,  $\geq 1$  Ag halide emulsion layer contains core/shell-type AgBr emulsion, and the Ag halide emulsion layer and/or other photog. constitutional layer contains a fog inhibitor from  $Ar(F)m(Y)n$  or  $(F)m(Y)nArXAr(F)p(Yl)q$  [Ar = benzene or naphthalene ring (including quinone types); Y, Yl = substituent to benzene or naphthalene ring; X = divalent connecting group; m, p = 1-5; n, q = 1-3; m + n  $\leq$  8; p + q  $\leq$  8]. This photog. material shows excellent sensitivity and storage stability.

IT 112056-11-8

RL: TEM (Technical or engineered material use); USES (Uses)  
(photog. fog inhibitor)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



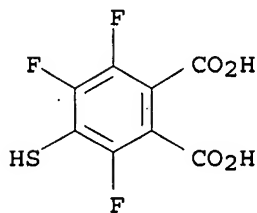
L5 ANSWER 60 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1989:125222 CAPLUS  
 DN 110:125222  
 TI High-sensitivity long shelf-life color photographic material  
 IN Nagai, Kenji; Ezaki, Atsuo; Iwamuro, Masao  
 PA Konica Co., Japan  
 SO Jpn. Kokai Tokkyo Koho, 20 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63143547	A	19880615	JP 1986-291180	19861205
PRAI	JP 1986-291180		19861205		

AB A color photog. material contains in  $\geq 1$  Ag halide emulsion layers a pyrazolotriazole-type magnetic coupler and, in the same or adjacent layer,  $\geq 1$  [(F)m(Y)nAr]kXk-1 [Ar = benzene or naphthalene ring including quinone forms; F = fluorine; Y = substituent on benzene or naphthalene ring; k = 1, 2; m = 1-5; n = 1-3; m + n  $\leq$  8; X = linking group between Ar when k = 2; when k = 2, Y, m, n may be the same or different]. The increase in fog and decrease in sensitivity owing to the use of the above coupler is suppressed by the above additive.

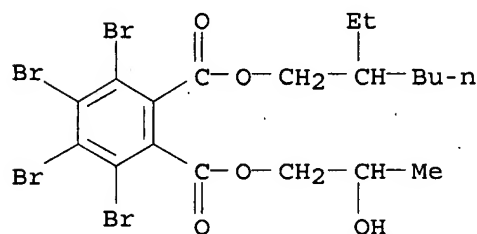
IT 112056-11-8  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (photog. fog inhibitor, high sensitivity color films containing)

RN 112056-11-8 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 61 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1989:76713 CAPLUS  
 DN 110:76713  
 TI Tetrahalophthalate esters as flame retardants for polystyrene resins  
 IN Bohlen, Joseph M.; Lovenguth, Ronald F.  
 PA Pennwalt Corp., USA  
 SO U.S., 18 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 4

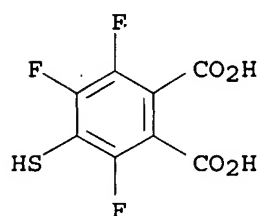
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4762861	A	19880809	US 1987-115211	19871030
	US 4923916	A	19900508	US 1988-221053	19880719
	WO 8903854	A1	19890505	WO 1988-US3839	19881028
	W: AU, BB, BG, BR, DK, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU, US				
	RW: AT, BE, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG				
	AU 8927854	A	19890523	AU 1989-27854	19881028
	AU 626532	B2	19920806		
	BR 8807274	A	19891031	BR 1988-7274	19881028
	EP 339074	A1	19891102	EP 1988-909875	19881028
	R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
	JP 02502026	T	19900705	JP 1988-509179	19881028
	HU 54720	A2	19910328	HU 1988-6711	19881028
	ES 2018098	A6	19910316	ES 1988-3328	19881031
	CA 1337310	C	19951010	CA 1988-581742	19881031
	NO 8902684	A	19890628	NO 1989-2684	19890628
	DK 8903235	A	19890629	DK 1989-3235	19890629
	FI 8903189	A	19890629	FI 1989-3189	19890629
	US 5086098	A	19920204	US 1990-622122	19901203
	AU 9221263	A	19921029	AU 1992-21263	19920825
PRAI	US 1987-115211	A3	19871030		
	US 1987-115688	A2	19871030		
	US 1988-173343	A2	19880325		
	US 1988-173344	A2	19880325		
	US 1988-173691	A2	19880325		
	US 1988-244421	A2	19880916		
	WO 1988-US3839	A	19881028		
	US 1989-322035	B1	19890310		
AB	A flame-retardant composition comprises polystyrene and a tetrahalophthalate. Thus, injection test specimens made from a composition containing Polysar 525 (high-impact polystyrene) 81.5, decabromodiphenyl oxide 9, dioctyl tetrabromophthalate 5.5, and Sb2O3 4 parts showed fire resistance UL-94 rating V-0.				
IT	111043-72-2 RL: USES (Uses) (flame retardants, for polystyrene)				
RN	111043-72-2 CAPLUS				
CN	1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-, 2-ethylhexyl 2-hydroxypropyl ester (9CI) (CA INDEX NAME)				



L5 ANSWER 62 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1989:57311 CAPLUS  
 DN 110:57311  
 TI Preparation of trifluoromercaptophthalic acid as a synthetic intermediate  
 IN Hiromoto, Kazuhiko; Otsubo, Akihiro  
 PA Showa Denko K. K., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1

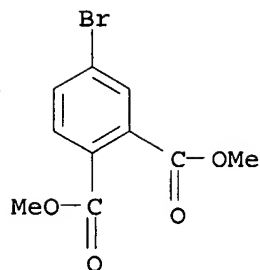
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63162669	A	19880706	JP 1986-308761	19861226
PRAI	JP 1986-308761		19861226		
OS	CASREACT 110:57311				
AB	Title compound is prepared by treatment of tetrafluorophthalic acid with $\geq 1$ compds. chosen from alkali metal, alkaline earth metal, or ammonium hydrosulfide in polar aprotic solvents. Refluxing 3,4,5,6-tetrafluorophthalic acid with NaSH hydrate in pyridine for 2 h gave 80% 3,5,6-trifluoro-4-mercaptophthalic acid.				
IT	112056-11-8P, 3,5,6-Trifluoro-4-mercaptophthalic acid RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, by sulfuration of tetrafluorophthalic acid)				
RN	112056-11-8 CAPLUS				
CN	1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)				



L5 ANSWER 63 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1988:591041 CAPLUS  
 DN 109:191041  
 TI Manufacture of 3,3',4,4'-biphenyltetracarboxylic acid by hydrolysis and dimerization of 4-halophthalate esters  
 IN Shoji, Fusaji; Kataoka, Fumio  
 PA Hitachi, Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63072649	A	19880402	JP 1986-215745	19860916
	JP 06062497	B	19940817		
PRAI	JP 1986-215745		19860916		
AB	The title acid (I) is manufactured by heating aqueous solns. containing 1 mol 4-halophthalic acid esters and $\geq 2$ mol bases, supported noble metal catalysts, and formate salts. Thus, 26.6 g mixture of di-Me 4-bromophthalate 90, di-Me 3-bromophthalate 0.3, and di-Me phthalate 9.7 mol%, 16.8 g KOH, and 70 g H <sub>2</sub> O were placed in a reactor, mixed with 2.5 g Pd(5%)/C catalyst, and heated to hydrolyze the esters at 90-110° for .apprx.1 h. Then 13.6 g HCO <sub>2</sub> Na was added in portions, and the mixture was heated with stirring for 5 h to cause debromodimerization, then acidified with HCl to give 13.1 g I.				
IT	87639-57-4, 4-Bromophthalic acid dimethyl ester RL: USES (Uses) (alkaline hydrolysis and debromodimerization of, in manufacture of biphenyltetracarboxylic acid)				
RN	87639-57-4 CAPLUS				
CN	1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)				



L5 ANSWER 64 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1988:519748 CAPLUS

DN 109:119748

TI Thermal fog-suppressed photothermographic film

IN Kono, Junichi; Sakamoto, Hidekazu

PA Konica Co., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 63058438	A	19880314	JP 1986-204468	19860829
	JP 06056477	B	19940727		
PRAI	JP 1986-204468		19860829		

AB Claimed is a photothermog. Ag halide photosensitive element containing  $\geq 1$  fog-inhibitors selected from FmALn and FmA(L)nXA(F)jMi (A = benzene or naphthalene ring including quinone forms; L, M = ring substituents,  $\geq 1$  of which are SH or salts thereof; X = divalent group m, j = 1-5; n, i = 1-3; m + n  $\leq$  8; i + j  $\leq$  8).

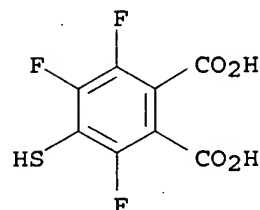
IT 112056-11-8

RL: USES (Uses)

(photothermog. fog inhibitor)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 65 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1988:21511 CAPLUS

DN 108:21511

TI 3,5,6-Trifluoro-4-mercaptophthalic acid as a material for agrochemicals and pharmaceuticals

IN Ishikawa, Ryuichi; Kaieda, Osamu; Takatani, Norio

PA Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 3 pp.

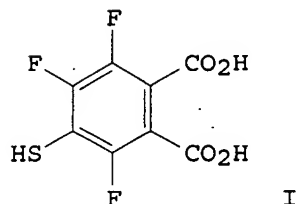
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 62185066	A	19870813	JP 1986-26885	19860212
	JP 05019546	B	19930317		
PRAI	JP 1986-26885		19860212		
GI					

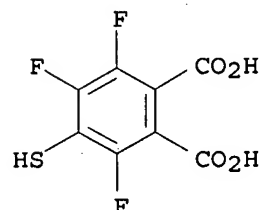


AB The title acid (I), useful as an epoxy hardener, a functional macromol. material, photog. materials (no data), and starting materials for agrochems. and pharmaceuticals, is prepared An aqueous solution of NaSH was added to a solution of tetrafluorophthalic acid in aqueous NaOH at 20° under N and heated 12 h at 90° to give 78.8% I.

IT 112056-11-8P, 3,5,6-Trifluoro-4-mercaptophthalic acid  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as material for polymers, epoxy hardeners, material for agrochem., pharmaceuticals, and photog.)

RN 112056-11-8 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 3,4,6-trifluoro-5-mercapto- (9CI) (CA INDEX NAME)



L5 ANSWER 66 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1987:577182 CAPLUS

DN 107:177182

TI Tetrahalophthalate esters as flame retardants for polyphenylene ether resins

IN Lovenguth, Ronald Francis

PA Pennwalt Corp., USA

SO PCT Int. Appl., 57 pp.  
 CODEN: PIXXD2

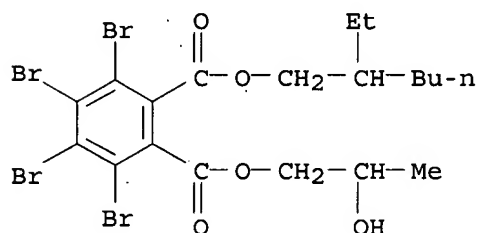
DT Patent

LA English

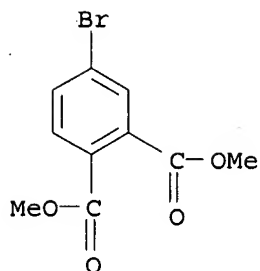
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 8701713	A1	19870326	WO 1986-US1771	19860827
	W: AU, BR, JP				
	RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE				
	US 4764550	A	19880816	US 1986-896896	19860815
	AU 8663376	A	19870407	AU 1986-63376	19860827
	AU 594375	B2	19900308		
	EP 235266	A1	19870909	EP 1986-905583	19860827

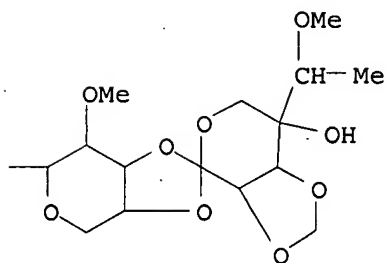
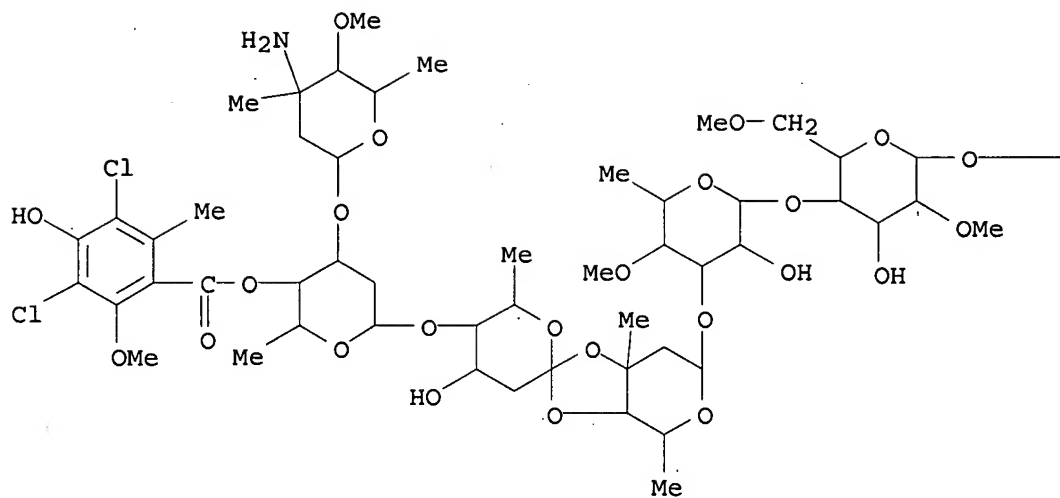
EP 235266 B1 19930303  
 R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE  
 BR 8606871 A 19871103 BR 1986-6871 19860827  
 JP 63500947 T 19880407 JP 1986-504864 19860827  
 JP 07072248 B 19950802  
 AT 86269 T 19930315 AT 1986-905583 19860827  
 CA 1329666 C 19940517 CA 1986-518300 19860916  
 PRAI US 1985-777043 A 19850917  
 US 1986-896896 A 19860815  
 EP 1986-905583 A 19860827  
 WO 1986-US1771 A 19860827  
 AB Polyoxyphenylenes containing  $\geq 10\%$  vinylarom. resins and tetrahalophthalate ester flame retardants have good hydrolytic and dimensional stability, dielec. properties, and fire resistance. A mixture of 92 parts 50:50 polyoxyphenylene-high-impact polystyrene blend and 8 parts reaction products of tetrabromophthalic anhydride 3.0, Carbowax 350 3.0, and propylene oxide 6.0 mol gave a 1/8-in. sheet with limiting O index 29, vs 26 for the polymer blend.  
 IT 111043-72-2  
 RL: USES (Uses)  
 (fireproofing agents, for polyoxyphenylenes)  
 RN 111043-72-2 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-, 2-ethylhexyl 2-hydroxypropyl ester (9CI) (CA INDEX NAME)



L5 ANSWER 67 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1984:6227 CAPLUS  
 DN 100:6227  
 TI A convenient synthesis of 4-ethynylphthalic anhydride via 2-methyl-3-butyn-2-ol  
 AU Sabourin, Edward T.; Onopchenko, Anatoli  
 CS Chem. Miner. Div., Gulf Res. and Dev. Co., Pittsburgh, PA, 15230, USA  
 SO Journal of Organic Chemistry (1983), 48(25), 5135-8  
 CODEN: JOCEAH; ISSN: 0022-3263  
 DT Journal  
 LA English  
 OS CASREACT 100:6227  
 AB The palladium(0) complex-catalyzed reaction of di-Me 4-bromophthalate with 2-methyl-3-butyn-2-ol gave over 95% yield of arylated methylbutynol, which was simultaneously cleaved and saponified with aqueous caustic to produce 4-ethynylphthalic acid (98%), a precursor to the corresponding anhydride.  
 IT 87639-57-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and substitution reaction with methylbutynol, catalysts for)  
 RN 87639-57-4 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME)



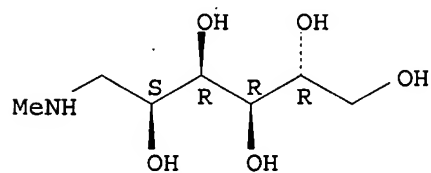
L5 ANSWER 68 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1982:492671 CAPLUS  
 DN 97:92671  
 TI Chemical modification of everninomicins  
 AU Ganguly, A. K.; Girijavallabhan, V. M.; Miller, G. H.; Sarre, O. Z.  
 CS Res. Div., Schering-Plough Corp., Bloomfield, NJ, 07003, USA  
 SO Journal of Antibiotics (1982), 35(5), 561-70  
 CODEN: JANTAJ; ISSN: 0021-8820  
 DT Journal  
 LA English  
 OS CASREACT 97:92671  
 AB Novel antibiotic everninomicin D is chemical transformed into new biol.  
 active derivs. Reactions of a nitro group attached to a tertiary carbon  
 center have been investigated. Synthesis and reactions of  
 hydroxylaminoeverninomicin D, aminoeverninomicin D and their derivs. have  
 been discussed.  
 IT 70051-49-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)  
 RN 70051-49-9 CAPLUS  
 CN  $\beta$ -D-Mannopyranoside, O-(R)-4-C-(1-methoxyethyl)-2,3-O-methylene-D-  
 lyxopyranosylidene-(1 $\rightarrow$ 3-4)-2-O-methyl- $\alpha$ -L-lyxopyranosyl  
 O-3-amino-2,3,6-trideoxy-3-C-methyl-4-O-methyl- $\alpha$ -L-ribo-  
 hexopyranosyl-(1 $\rightarrow$ 3)-O-2,6-dideoxy-4-O-(3,5-dichloro-4-hydroxy-2-  
 methoxy-6-methylbenzoyl)- $\beta$ -D-arabino-hexopyranosyl-(1 $\rightarrow$ 4)-O-2,6-  
 dideoxy-D-ribo-hexopyranosylidene-(1 $\rightarrow$ 3-4)-O-2,6-dideoxy-3-C-methyl-  
 $\beta$ -D-arabino-hexopyranosyl-(1 $\rightarrow$ 3)-O-6-deoxy-4-O-methyl- $\beta$ -D-  
 galactopyranosyl-(1 $\rightarrow$ 4)-2,6-di-O-methyl-, compd. with  
 1-deoxy-1-(methylamino)-D-glucitol (1:1) (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 68473-41-6  
 CMF C66 H101 Cl2 N O33



CM 2

CRN 6284-40-8  
CMF C7 H17 N O5

Absolute stereochemistry.



L5 ANSWER 69 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1981:438669 CAPLUS  
DN 95:38669  
TI Alkyl-substituted fluorescent compounds, their use and conjugates  
IN Khanna, Pyare Lal; Ullman, Edwin Fisher  
PA Syva Co., USA  
SO Eur. Pat. Appl., 60 pp.  
CODEN: EPXXDW  
DT Patent  
LA English

FAN.CNT'1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 25912	A1	19810401	EP 1980-105253	19800903
	EP 25912	B1	19860730		
	R: DE, FR, GB, IT, SE				
	US 4351760	A	19820928	US 1979-73158	19790907
	CA 1159823	A1	19840103	CA 1980-354646	19800619
	JP 56043279	A	19810421	JP 1980-110158	19800811
	JP 01047471	B	19891013		
	US 4481136	A	19841106	US 1982-399506	19820719
	US 4588697	A	19860513	US 1984-664121	19841023
	US 4774191	A	19880927	US 1986-826177	19860205
	JP 01308485	A	19891213	JP 1989-69142	19890320
	JP 03004596	B	19910123		
PRAI	US 1979-73158	A	19790907		
	US 1982-399506	A3	19820719		
	US 1984-664121	A3	19841023		

OS CASREACT 95:38669

AB Fluorescent conjugates of fluorescein analogs are described; which have a variety of uses, especially in immunoassays. The preparation of the fluorescent

precursors is described. These compds. are 2,7-dialiph.-6-hydroxy-3H-xanthen-3-ones, having at least 2 chloro substituents, with the precursors having a linking group or functionality on a group, either aliphatic or aromatic, bonded to the 2- or 9-position of the xanthene. Thus, 2,7-di(2''-carboxyethyl)-9-(2'-carboxyphenyl)-6-hydroxy-3H-xanthen-3-one was prepared. A mixture of 1.1 g of 4-(2'-carboethyl)resorcinol, 0.45 g phthalic anhydride, and 250 mg ZnCl<sub>2</sub> was heated in a reaction flask at 160-170° for 0.5 h. The material then was treated with water, filtered, the solid dissolved in 5% NaOH, then acidified and the resultant yellow solid filtered and dried. The product was further purified by thin-layer chromatog.

IT 78246-67-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and IgG conjugation to, for fluorescent immunoassay)

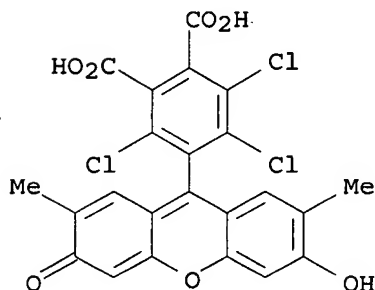
RN 78246-67-0 CAPLUS

CN Benzoic acid, 2-[[[(carboxymethyl)amino]carbonyl]-3,4,6(or 3,5,6)-trichloro-5(or 4)-(6-hydroxy-2,7-dimethyl-3-oxo-3H-xanthen-9-yl)-(9CI) (CA INDEX NAME)

CM 1.

CRN 78196-42-6

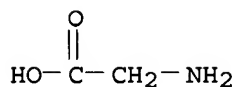
CMF C23 H13 Cl3 O7



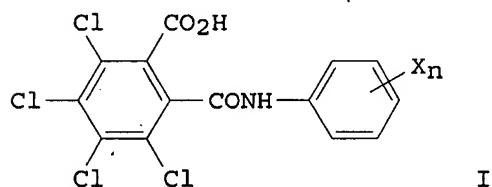
CM 2

CRN 56-40-6

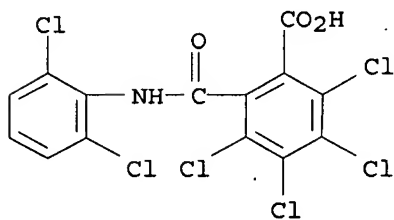
CMF C2 H5 N O2



L5 ANSWER 70 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1981:169280 CAPLUS  
 DN 94:169280  
 TI Inhibitory activities to rice bacterial leaf blight of N-substituted  
 3,4,5,6-tetrachlorophthalamic acids and their related compounds  
 AU Honda, Takeo; Nakagami, Kazuto; Koremura, Mitsunobu; Ishida, Mitsuo;  
 Yamazaki, Toshiharu  
 CS Cent. Res. Lab., Ube Ind., Ltd., Ube, Japan  
 SO Nippon Noyaku Gakkaishi (1980), 5(3), 385-91  
 CODEN: NNGADV; ISSN: 0385-1559  
 DT Journal  
 LA Japanese  
 GI



AB Thirty N-phenyl-3,4,5,6-tetrachlorophthalamic acids (I; X = Cl, Et, Me, MeO, or NO<sub>2</sub>, n = 0-3), N-(1-naphthyl)-3,4,5,6-tetrachlorophthalamic acid (II) [77106-23-1], 4 derivs. of II, and 25 related compds. were tested for the control of rice bacterial leaf blight disease, caused by *Xanthomonas oryzae*. Some of I (n = 2 or 3), II, and II derivs. were very active, I (Xn = 2,3-dichlorophenyl) (III) [77106-12-8] and II having the highest activities in spray and root applications. Activities of II and III were not exceeded by those of corresponding derivs. of 3,4,5,6-tetrabromo- and 3,4,5,6-tetraiodophthalamic acid or K or Na salts of III.  
 IT 77106-11-7P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and rice bacterial leaf blight disease control by)  
 RN 77106-11-7 CAPLUS  
 CN Benzoic acid, 2,3,4,5-tetrachloro-6-[[2,6-dichlorophenyl]amino]carbonyl]- (9CI) (CA INDEX NAME)



AN 1979:168928 CAPLUS  
 DN 90:168928  
 TI Aminoeverninomicin and derivatives  
 IN Ganguly Ashit K.; Girijavallabhan, Viyyoor M.; Sarre, Olga; Reimann, Hans  
 PA Schering A.-G., USA  
 SO U.S., 7 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN. CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4129720	A	19781212	US 1977-833838	19770916
	BE 863802	A1	19780809	BE 1978-185032	19780209
	FI 7800420	A	19780815	FI 1978-420	19780209
	NO 7800445	A	19780815	NO 1978-445	19780209
	NL 7801522	A	19780816	NL 1978-1522	19780209
	FR 2384791	A1	19781020	FR 1978-3662	19780209
	ES 466807	A1	19790101	ES 1978-466807	19780209
	AU 7833139	A	19790816	AU 1978-33139	19780209
	AT 7800904	A	19800115	AT 1978-904	19780209
	GB 1589954	A	19810520	GB 1978-5286	19780209
	DK 7800617	A	19780815	DK 1978-617	19780210
	JP 53103495	A	19780908	JP 1978-14871	19780210
	ZA 7800808	A	19790131	ZA 1978-808	19780210
PRAI	US 1977-768124	A2	19770214		
	US 1977-833838	A	19770916		
	CH 1978-1255	A	19780206		

OS MARPAT 90:168928

AB Aminoeverninomicin B, -everninomicin C, and -everninomicin D and their N-acyl, N-acyl-N-hydroxyl, N-alkyl, N,N-dialkyl derivs. (acyl = C1-12 acyl; alkyl = C1-12 alkyl), and pharmaceutically acceptable salts of these compds., useful as bactericides (no data), were prepared Thus, a mixture of everninomicin D and N-methylglucamine was hydrogenated in MeOCH<sub>2</sub>CH<sub>2</sub>OH over Raney Ni to give aminoeverninomicin D N-methylglucamine salt.

IT 70051-49-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of)

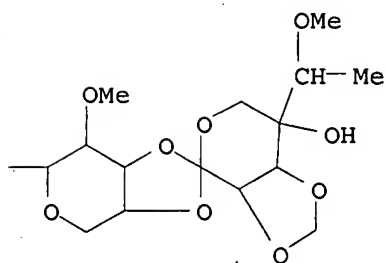
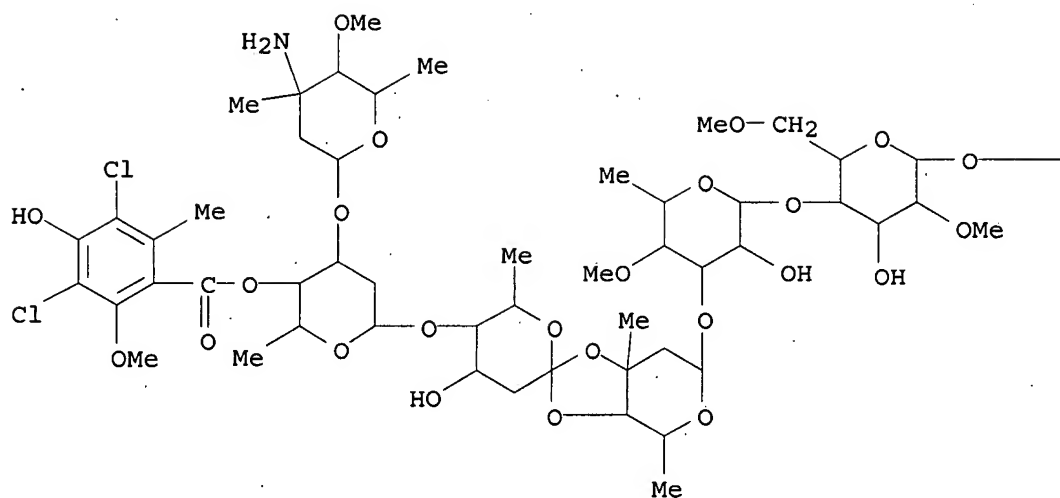
RN 70051-49-9 CAPLUS

CN  $\beta$ -D-Mannopyranoside, O-(R)-4-C-(1-methoxyethyl)-2,3-O-methylene-D-lyxopyranosylidene-(1 $\rightarrow$ 3-4)-2-O-methyl- $\alpha$ -L-lyxopyranosyl  
 O-3-amino-2,3,6-trideoxy-3-C-methyl-4-O-methyl- $\alpha$ -L-ribo-hexopyranosyl-(1 $\rightarrow$ 3)-O-2,6-dideoxy-4-O-(3,5-dichloro-4-hydroxy-2-methoxy-6-methylbenzoyl)- $\beta$ -D-arabino-hexopyranosyl-(1 $\rightarrow$ 4)-O-2,6-dideoxy-D-ribo-hexopyranosylidene-(1 $\rightarrow$ 3-4)-O-2,6-dideoxy-3-C-methyl- $\beta$ -D-arabino-hexopyranosyl-(1 $\rightarrow$ 3)-O-6-deoxy-4-O-methyl- $\beta$ -D-galactopyranosyl-(1 $\rightarrow$ 4)-2,6-di-O-methyl-, compd. with  
 1-deoxy-1-(methylamino)-D-glucitol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 68473-41-6

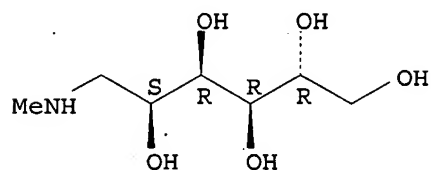
CMF C66 H101 Cl2 N O33



CM 2

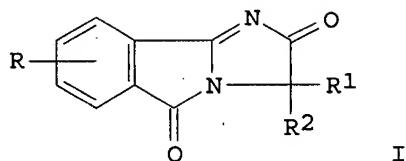
CRN 6284-40-8  
CMF C7 H17 N O5

Absolute stereochemistry.



L5 ANSWER 72 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1979:34992 CAPLUS  
DN 90:34992  
TI Herbicide composition  
PA American Cyanamid Co., USA  
SO Neth. Appl., 48 pp.  
CODEN: NAXXAN  
DT Patent  
LA Dutch  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 7700386	A	19780718	NL 1977-386	19770114
PRAI	NL 1977-386	A	19770114		
GI					

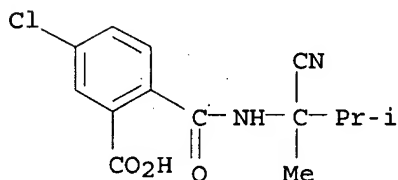


AB Imidazoisoindolediones I (R = H, Me, NO<sub>2</sub>, Cl, OMe, or SMe; R<sub>1</sub> = C<sub>1</sub>-4 alkyl; R<sub>2</sub> = C<sub>1</sub>-6 alkyl, C<sub>3</sub>-6 cycloalkyl, C<sub>2</sub>-4 alkenyl, Ph, halophenyl, or benzyl; or CR<sub>1</sub>R<sub>2</sub> = C<sub>3</sub>-6 cycloalkyl) showed herbicidal activity against mono- and dicots when applied pre- or postemergence, especially against *Cyperus* species and perennials, and at low concns. showed plant growth-regulating activity. I are prepared by cyclization of dioxoisindolineacetamide or N-(carbamoylalkyl)phthalamates. For example, I (R = H; R<sub>1</sub> = Me; R<sub>2</sub> = CHMe<sub>2</sub>) [63081-24-3] was highly to totally effect against *Convolvulus arvensis*, *Agropyron repens*, *Cyperus rotundus*, *Rubus allegheniensis*, *Diervilla lonicera*, and *Rosa multiflora* when applied preemergence at 1.1 kg/ha. This compound was prepared by reaction of Me iso-Pr ketone [563-80-4] with NH<sub>4</sub>Cl and NaCN in 28% NH<sub>4</sub>OH with cooling, reaction of the resulting 2-amino-2,3-dimethylbutyronitrile [13893-53-3] with phthalic anhydride [85-44-9], cyclization of the phthalamic acid derivative [63081-72-1] to the phthalimidonitrile derivative [63081-94-7] in refluxing CH<sub>2</sub>Cl<sub>2</sub>, conversion to α-isopropyl-α-methyl-1,3-dioxo-2-isindolineacetamide [63081-23-2] with H<sub>2</sub>SO<sub>4</sub>, and cyclization by heating under basic conditions.

IT 63081-89-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and cyclization of)

RN 63081-89-0 CAPLUS

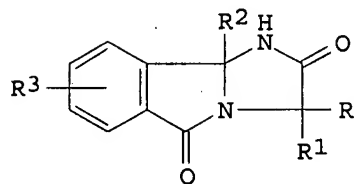
CN Benzoic acid, 5-chloro-2-[[[(1-cyano-1,2-dimethylpropyl)amino]carbonyl]-  
 (9CI) (CA INDEX NAME)



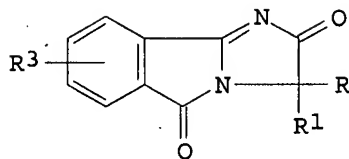
L5 ANSWER 73 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1977:568034 CAPLUS  
 DN 87:168034  
 TI Dihydroimidazoisoindolediones as herbicidal agents  
 IN Los, Marinus  
 PA American Cyanamid Co., USA  
 SO U.S., 16 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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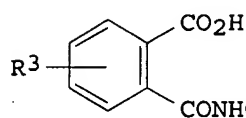
PI	US 4041045	A	19770809	US 1975-631356	19751112
	US 4110103	A	19780829	US 1977-781234	19770325
PRAI	US 1975-631356	A3	19751112		
GI					



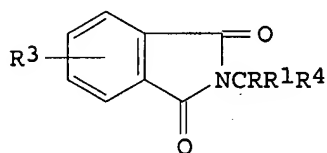
I



II



III



IV

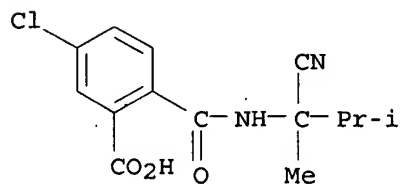
AB Dihydroimidazoisindolediones I (R = Me, CHMe2; R1 = Me, Et, Pr, CHMe2, CHEt2, cyclopropyl, CHMeEt, 4-ClC6H4, CH2Ph, CH2CHMe2; RR1 = (CH2)4,5, CHMe(CH2)4; R2 = H; R3 = H, 6-Me, 9-Me, 7-Me, 8-Me, 7-Cl, 8-Cl, 6-NO2, 9-NO2, 7-OMe, 8-OMe, 6-Cl, 9-Cl, 6-SMe, 9-SMe) were prepared by NaBH4 reduction of II. I (R = Me, R1 = CHMe2, R2 = NH2, NMe2, OH, OMe, SMe, NHMe, R3 = H) were obtained by treating II with R2H. II were prepared by treating RR1CO with NaCN and NH4OH, treating RR1C(CN)NH2 with phthalic anhydrides, dehydrating phthalamic acids III, hydrolyzing the nitriles IV (R4 = CN), and cyclizing IV (R4 = CONH2). I (R = Me, R1 = CHMe2, R2 = R3 = H) at 0.56 kg/hectare gave complete kill of *Sesbania exaltata*, *Brassica kaber*, etc.

IT 63081-89-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and cyclization of)

RN 63081-89-0 CAPLUS

CN Benzoic acid, 5-chloro-2-[[[(1-cyano-1,2-dimethylpropyl)amino]carbonyl]- (9CI) (CA INDEX NAME)



L5 ANSWER 74 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1977:423285 CAPLUS

DN 87:23285

TI Imidazoisindolediones used as herbicidal agents

IN Los, Marinus

PA American Cyanamid Co., USA

SO U.S., 18 pp.

CODEN: USXXAM

DT Patent

LA English

FAN:CNT 1



FR 2059549	A5	19710604		
SE 372021	B	19741209	SE 1970-10129	19700722
DK 133336	B	19760503	DK 1970-3806	19700722
DK 133336	C	19781113		
NO 134339	B	19760614	NO 1970-2873	19700722
PRAI DE 1969-1937307	A	19690723		

GI For diagram(s), see printed CA Issue.

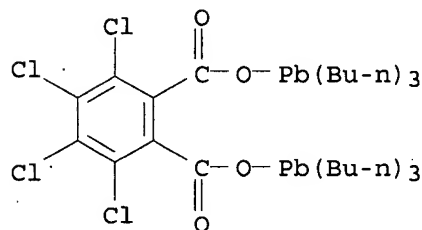
AB The biocidal title compds. (I), where X = Cl, Br, or I, R = trialkyl (or triphenyl)tin or -lead, R1 = H, alkyl, or trialkyl(or triphenyl) tin or -lead, as e.g., antifouling agents in paints for buildings or ships, and in the preservation of wool, silk, cotton, wood, etc., were prepared Thus, refluxing 28.6 parts tetrachlorophthalic anhydride and 59.6 parts (Bu3Sn)2O in C6H6 3 hr gave 96% I (X = Cl, R = R1 = SnBu3). Among 29 compds. similarly prepared were I (R, R1, and X given): Me, SnBu3, Cl; CH2CH2Br, PbBu3, Cl; 2-octyldodecyl, SnPh3, Cl; PbBu3, PbBu3, Br; PbPh3, H, I.

IT 31430-90-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 31430-90-7 CAPLUS

CN Plumbane, [(tetrachlorophthaloyl)dioxy]bis[tributyl- (8CI) (CA INDEX NAME)]



L5 ANSWER 76 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1967:85589 CAPLUS

DN 66:85589

TI Preparation of some 4- or 5-substituted 2-tert-butyl-benzoic acids

AU Baas, J. M. A.; Wepster, B. M.

CS Tech. Univ., Delft, Neth.

SO Recueil des Travaux Chimiques des Pays-Bas (1967), 86(1), 69-79

CODEN: RTCPA3; ISSN: 0165-0513

DT Journal

LA English

GI For diagram(s), see printed CA Issue.

AB A large number of 2,4,5-XYZC6H2Bu-tert (I) was prepared A mixture of 52 g. I (X

= Br, Y = CO2H, Z = H) was refluxed with 5 ml. H2SO4 and 100 ml. MeOH to give I (X = Br, Y = CO2Me, Z = H) (II), b0.7 113-15°, n25D 1.5456. MeMgI, prepared from 49 g. MeI and 8.4 g. Mg in 75 ml. Et2O, was treated dropwise with 49 g. II in 50 ml. Et2O. The mixture was refluxed 1 hr. and treated with 40 g. NH4Cl in 250 ml. H2O to give 49% I (X = Br, Y = CMe2OH, Z = H) (III), m. 71.5-72° (petroleum ether). III (37 g.) in 50 ml. Ac2O was refluxed 3 hrs. to give upon distillation in vacuo 83% of a fraction b1.4 115-33° which contained .apprx.80% I (X = Br, Y = CH2:CMe, Z = H) (IV). The IV-containing fraction in 40 ml. EtOH was reduced with H in the presence of Adams catalyst to give 71% I (X = Br, Y = iso-Pr, Z = H) (V), b1.1 101-3°, n25D 1.5342. V (7.65 g.) in 50 ml. Et2O was refluxed with 0.72 g. Mg and small amts. of iodine and MeI for 4 hrs. The solution was poured into 200 g. solid CO2 in 100 ml. Et2O and the mixture acidified with 2N HCl. The Et2O layer was extracted with 100 ml. 2N KOH and acidified to give 40% I (X = CO2H, Y = iso-Pr, Z = H) (VI), m. 99.5-100° (MeOH). I (X = Br, Y = NH2, Z = H) (VII) (CA 65, 5383f) (25.0 g.) in 120 ml. H2SO4 and 250 ml. water was diazotized with 7.6 g. NaNO2 in 50 ml.

water at  $-5^{\circ}$ . The mixture was left overnight, heated 1 hr. at  $40-50^{\circ}$  and steam-distilled and treated as usual to give 52% I (X = Br, Y = OH, Z = H) (VIII), m.  $44-5.5^{\circ}$ . VIII (13 g.) and 2.5 g. NaOH in 50 ml. water was treated dropwise with 10 g.  $\text{Me}_2\text{SO}_4$  at  $0^{\circ}$  to give 74% I (X = Br, Y = MeO, Z = H) (IX), b.p.  $103-4^{\circ}$ ,  $n_{\text{D}}^{25} 1.5459$ . I (X =  $\text{CO}_2\text{H}$ , Y = MeO, Z = H) (X), m.  $107-8^{\circ}$ , was prepared from IX in 42% yield similarly to VI. Deamination of VII (Klouwen and Boelens, CA 55, 27186a) gave I (X = Br, Y = H, Z = H) (XI). I (X =  $\text{CO}_2\text{H}$ , Y = H, Z = H) (XII), m.  $68-8.5^{\circ}$ , was prepared from XI in 62% yield similarly to X and VI. Nitration of XII (Crawford and Stewart, CA 48, 6398b) gave I (X =  $\text{CO}_2\text{H}$ , Y =  $\text{NO}_2$ , Z = H) (XIII), m.  $172-3.5^{\circ}$ . XIII (0.99 g.) in 25 ml. 2N  $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$  was hydrogenated in the presence of 0.5 g. Ni to give 62% I (X =  $\text{CO}_2\text{H}$ , Y =  $\text{NH}_2$ , Z = H) (XIV) m.  $185^{\circ}$ . XIV (5.6 g.) in 75 ml. 30% HBr was treated with 15 g. CuBr. The mixture was diazotized with 2.5 g.  $\text{NaNO}_2$  in 10 ml. water at  $-7^{\circ}$ , stirred 1 hr., heated to  $40^{\circ}$ , and steam distilled to give 47% I (X =  $\text{CO}_2\text{H}$ , Y = Br, Z = H) (XV), m.  $123-4.5^{\circ}$ . A mixture of 1 g. XIII, 1 g. NaOAc, 1.1 g. Norit, 4 ml. 40%  $\text{H}_2\text{CO}$ , 35 ml. MeOH, and 2 ml.  $\text{PdCl}_2$  solution (prepared by boiling 0.25 g.  $\text{PdCl}_2$  in 5 ml. 2N HCl) was hydrogenated at 50 atmospheric to give 40% I (X =  $\text{CO}_2\text{H}$ , Y =  $\text{MNe}_2$ , Z = H) (XVI), decomposed  $134^{\circ}$ . I (X =  $\text{CO}_2\text{H}$ , Y = Cl, Z = H), m.  $109.5-10.5^{\circ}$ , was obtained from XIV in 41% yield, similarly to XV. I (X = Br, Y = tert-Bu, Z = H) (1.06 g.) in 5 ml. Et<sub>2</sub>O was treated with 2.5 g. 20% BuLi in C<sub>7</sub>H<sub>16</sub> at  $0^{\circ}$ . The mixture was kept 1 hr., poured on solid  $\text{CO}_2$ , and treated with 100 ml. 2N HCl to give 57% I (X =  $\text{CO}_2\text{H}$ , Y = tert-Bu, Z = H), m.  $123.5-4.5^{\circ}$ . I (X =  $\text{NH}_2$ , Y = H, Z =  $\text{NO}_2$ ) (56.5 g.) in 175 ml. AcOH was treated with 75 ml. 30%  $\text{H}_2\text{SO}_4$ . The mixture was diazotized with 23 g.  $\text{NaNO}_2$  at  $-5^{\circ}$ , stirred 5 hrs., and filtered. The filtrate was added dropwise to stirred 92 g. KCN and 64 g. CuCN in 880 ml. H<sub>2</sub>O at  $75^{\circ}$  to give after steam-distillation 73% I (X = CN, Y = H, Z =  $\text{NO}_2$ ) (XVII), m.  $122-3^{\circ}$  (petroleum ether-MePh). XVII (42 g.) in 70 ml.  $\text{H}_2\text{SO}_4$  was heated for 6 hrs. at  $90^{\circ}$ , kept overnight, treated with 290 ml. AcOH, 290 ml. water, and 28 g.  $\text{NaNO}_2$  in 280 ml. water to give 83% I (X =  $\text{CO}_2\text{H}$ , Y = H, Z =  $\text{NO}_2$ ) (XVIII) m.  $138.5-9.5^{\circ}$ . XVIII (34 g.) in 150 ml. EtOH was hydrogenated at  $50^{\circ}$  using 3 g. Raney Ni to give 73% I (X =  $\text{CO}_2\text{H}$ , Y = H, Z =  $\text{NH}_2$ ) (XIX), m.  $175^{\circ}$ . XIX (3 g.) in 100 ml. 30% HBr was treated dropwise with 1.6 g.  $\text{NaNO}_2$  in 10 ml. H<sub>2</sub>O at  $-10^{\circ}$ . The mixture was stirred 30 min., filtered, and the filtrate treated with 15 g. CuBr and 20 g. KBr in 100 ml. H<sub>2</sub>O to give after heating 53% I (X =  $\text{CO}_2\text{H}$ , Y = H, Z = Br) (XX), m.  $117-18^{\circ}$ . I (X =  $\text{CO}_2\text{H}$ , Y = H, Z =  $\text{NMe}_2$ ), m.  $165^{\circ}$ , was prepared in 57% yield from XVIII similarly to XVI. I (X =  $\text{CO}_2\text{H}$ , Y = H, Z = Cl), m.  $120.5-1.5^{\circ}$ , was prepared from XIX in 59% yield, similarly to XX. I (X = Br, Y = H, Z =  $\text{NH}_2$ )-HCl (20.5 g.) in 180 ml. 6N  $\text{H}_2\text{SO}_4$  was diazotized with 6 g.  $\text{NaNO}_2$  in 20 ml. water at  $0^{\circ}$ . The mixture was filtered and the filtrate added to a boiling mixture of 200 ml. water and 50 ml.  $\text{H}_2\text{SO}_4$  and distilled. The distillate was processed as usual to give 35% crude I (X = Br, Y = H, Z = OH) (XXI). The crude XXI (6 g.) in 25 ml. 1.2N KOH was treated dropwise with 5 g.  $\text{Me}_2\text{SO}_4$  at  $0^{\circ}$ . The mixture was refluxed 1 hr., made alkaline, and extracted with Et<sub>2</sub>O to give 58% I (X = Br, Y = H, Z =

MeO)

(XXII), b.p.  $124-8^{\circ}$ ,  $n_{\text{D}}^{25} 1.5469$ . A Grignard solution prepared from 3 g. XXII and 0.3 g. Mg was treated as for the preparation of VI to give 41% I (X =  $\text{CO}_2\text{H}$ , Y = H, Z = MeO), m.  $113-14^{\circ}$ . Oxidation of I (X = Me, Y = H, Z = tert-Bu) (4.8 g.) in 18 ml. pyridine, 9 ml. water, and 2.2 g. KOH with 10 g.  $\text{KMnO}_4$  at  $95^{\circ}$  for 3 hrs. gave 38% I (X =  $\text{CO}_2\text{H}$ , Y = H, Z = tert-Bu), m.  $164-5^{\circ}$  (MeOH). Dinitration of I (X = H, Y = tert-Bu, Z = H) gave I (X =  $\text{NO}_2$ , Y = tert-Bu, Z =  $\text{NO}_2$ ) (XXIII), m.  $193-4^{\circ}$  (iso-PrOH) (Legge, CA 42, 132h). XXIII (11.8 g.) in 425 ml. MeOH was treated with 10.5 g. Na<sub>2</sub>S in water and 1.5 g. S. The mixture was refluxed 5 hrs., kept overnight, the MeOH distilled, and the residue extracted with Et<sub>2</sub>O. The Et<sub>2</sub>O extract was dried and treated with gaseous HCl. The precipitate was filtered off and rubbed with concentrated  $\text{NH}_4\text{OH}$  to give 51% I (X =  $\text{NH}_2$ , Y = tert-Bu, Z =  $\text{NO}_2$ ) (XXIV), m.  $128-8.5^{\circ}$  (petroleum ether-C<sub>6</sub>H<sub>6</sub>). I (X = CN, Y = tert-Bu, Z =  $\text{NO}_2$ ) (XXV), m.  $131-2.5^{\circ}$ , was obtained from XXIV in 46% yield similarly to XVII. I (X =  $\text{CO}_2\text{H}$ , Y = tert-Bu, Z =  $\text{NO}_2$ ),

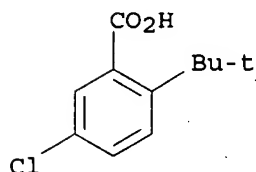
m. 187.5-8.5°, was obtained in 72% yield from XXV, similarly to XVIII.

IT 14034-94-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of)

RN 14034-94-7 CAPLUS

CN Benzoic acid, 2-tert-butyl-5-chloro- (8CI) (CA INDEX NAME)



L5 ANSWER 77 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1964:418036 CAPLUS

DN 61:18036

OREF 61:3029e-g

TI 2-Methoxy-3-chloro-6-methylbenzoic acid and derivatives

IN Richter, Sidney B.

PA Velsicol Chemical Corp.

SO 4 pp.

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3130205		19640421	US 1961-126891	19610726
PRAI	US		19610726		

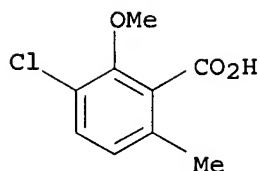
AB Title compds., useful as herbicides, are prepared Thus, 0.175 mole 2-chloro-5-methylphenol and 60 g. anhydrous K<sub>2</sub>CO<sub>3</sub> were placed in a bomb with 100 g. clay saddles and pressured to 600 lb./in.<sup>2</sup> with CO<sub>2</sub>. After being heated at 150° for 26 hrs. the bomb was cooled to give 81% 3-chloro-6-methylsalicylic acid (I), m. 174-6°. I (0.15 mole) was treated with 0.3 mole Me<sub>2</sub>SO<sub>4</sub> to yield 2-methoxy-3-chloro-6-methylbenzoic acid (II), m. 102-3°. The Na salt of II was prepared by treating 0.5 mole II in 500 cc. MeOH with 0.5 mole NaOH in 100 cc. MeOH. The following salts of II were also prepared: ammonium, Me<sub>2</sub>NH, diethanolamine, and morpholine. II (0.5 mole), 0.5 mole EtOH, and 3 g. p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H in benzene was refluxed to form the Et ester. The decyl and Bu esters were also prepared. The amide of II was prepared via the acid chloride (III). The N-n-decylamide and N,N-diethylamide were similarly prepared. III (1 mole) was added to 2 moles dry C<sub>5</sub>H<sub>5</sub>N in 1 l. dry benzene, and 1 mole II was added rapidly to the mixture to form the anhydride of II.

IT 856310-21-9P, o-Anisic acid, 3-chloro-6-methyl-, sodium salt

RL: PREP (Preparation)  
(preparation of)

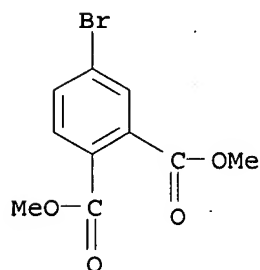
RN 856310-21-9 CAPLUS

CN o-Anisic acid, 3-chloro-6-methyl-, sodium salt (7CI) (CA INDEX NAME)



● Na

L5 ANSWER 78 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1930:25907 CAPLUS  
 DN 24:25907  
 OREF 24:2739c-d  
 TI 4-Bromophthalic anhydride and derivatives. I.  
 AU Waldmann, Hans  
 SO Journal fuer Praktische Chemie (Leipzi (1930), 126, 65-8  
 CODEN: JPCEAO; ISSN: 0021-8383  
 DT Journal  
 LA Unavailable  
 AB Adding 120 g. Br during 3 h. with stirring and cooling to 37 g. C<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>O and 50 g. NaOH in 285 g. H<sub>2</sub>O, then heating 24 h. at 60°, gives 80% of 4-bromophthalic acid (I), m. 169°; distillation of I gives 4-bromophthalic anhydride (II), m. 107°, b. 305-9°, which with PCl<sub>5</sub> at 160-70° for 8 h. gives the dichloride of I, m. 168°. II, MeOH and concentrated H<sub>2</sub>SO<sub>4</sub> give the di-Me ester of I, b. 303-6°, m. 40°. II and CO(NH<sub>2</sub>)<sub>2</sub>, heated at 150°, give 4-bromophthalimide, m. 229-5°, whose constitution was established by conversion with NaOCl into 4-bromoanthranilic acid.  
 IT 87639-57-4P, Phthalic acid, 4-bromo-, dimethyl ester  
 RL: PREP (Preparation)  
 (preparation of)  
 RN 87639-57-4 CAPLUS  
 CN 1,2-Benzenedicarboxylic acid, 4-bromo-, dimethyl ester (9CI) (CA INDEX NAME).



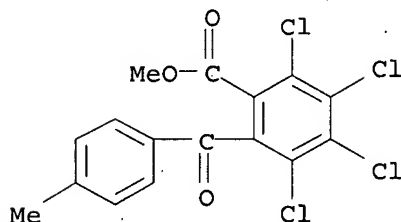
L5 ANSWER 79 OF 79 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1922:6213 CAPLUS  
 DN 16:6213  
 OREF 16:1088b-g  
 TI Friedel and Craft's reaction. Some substituted phthalic anhydrides with toluene and aluminium chloride  
 AU Lawrance, Walter A.  
 SO Journal of the American Chemical Society (1921), 43, 2577-81  
 CODEN: JACSAT; ISSN: 0002-7863  
 DT Journal  
 LA Unavailable

AB cf. C. A. 15, 94. As shown in the earlier paper, an unsym. phthalic anhydride with C<sub>6</sub>H<sub>6</sub> may give 2 acid products. In some of the expts. with PhMe described in this paper 2 acid products were obtained, in others only one. The sym. tetrahalophthalic anhydrides, as was to be expected, give only 1 acid product. The toluylnitrobenzoic acids are brownish amorphous powders with no sharp m. p. In all the acids obtained the PhMe is represented as entering the p-position to the Me group. The Na, K and NH<sub>4</sub> salts of the toluyltetrahalobenzoic acids are only slightly soluble in H<sub>2</sub>O. 3-O<sub>2</sub>NC<sub>6</sub>H<sub>3</sub>(CO)<sub>2</sub>O gives 51% of a mixture separated by means of MeOH into the less soluble 6-p-toluyyl-2-nitrobenzoic acid, m. 262-5° (decomposition), hydrolyzed by KOH at 215° to p-MeC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H and o-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H and synthesized (53% yield) from 3,2-O<sub>2</sub>N(EtO<sub>2</sub>C)C<sub>6</sub>H<sub>3</sub>COC<sub>2</sub>H<sub>5</sub>, PhMe and AlCl<sub>3</sub>, and the more soluble 2,3-isomer, darkens 105-7°, decomp. 122-6°, hydrolyzed to p-MeC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H and m-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H and synthesized from 2,6-O<sub>2</sub>N(EtO<sub>2</sub>C)C<sub>6</sub>H<sub>3</sub>COC<sub>2</sub>H<sub>5</sub>, PhMe and AlCl<sub>3</sub>. 4-O<sub>2</sub>NC<sub>6</sub>H<sub>3</sub>(CO)<sub>2</sub>O gives almost entirely the alc.-sol, 2-p-toluyyl-4-nitrobenzoic acid, m. 105° (decomposition), hydrolyzed to p-MeC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H and p-O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H and synthesized (55% yield) from 3,6-O<sub>2</sub>N(MeO<sub>2</sub>C)C<sub>6</sub>H<sub>3</sub>COC<sub>2</sub>H<sub>5</sub>, PhMe and AlCl<sub>3</sub>, and a small amount of a less soluble acid m. 211-8° (decomposition). 3-AcNHC<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>O gave the 2(or 6)-p-toluyyl-3(or 2)-aminobenzoic acids, separated into a Na<sub>2</sub>CO<sub>3</sub>-soluble portion (yield, 20%), m. 256-7°, and the Na<sub>2</sub>CO<sub>3</sub>-insol. isomer (40%), m. 206°; on hydrolysis both yield only p-MeC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H and BzOH; attempts to synthesize them by reduction of the NO<sub>2</sub> acids with FeSO<sub>4</sub> or Zn-AcOH were unsatisfactory, owing, partly, to the limited amount of the acids available. 4-Ac-NHC<sub>6</sub>H<sub>4</sub>(CO)<sub>2</sub>O gives 62% of the 2(or 6)-p-toluyyl-4(or 3)-aminobenzoic acids, consisting chiefly of the isomer m. 135-6°, with only a small amount of the acid m. 180-3°. C<sub>6</sub>Cl<sub>4</sub>-(CO)<sub>2</sub>O gives 94% 6-p-toluyyl-2,3,4,5-tetrachlorobenzoic acid, m. 174.5°; methyl ester, m. 96-7°. Tetrabromo acid (yield, 89%), m. 212°; methyl ester, m. 162.5°. Tetraiodo acid (yield, 91%), m. 266°; methyl ester, m. 199°.

IT 861781-99-9P, Benzoic acid, 2,3,4,5-tetrachloro-6-p-toluyyl-, methyl ester  
 RL: PREP (Preparation)  
 (preparation of)

RN 861781-99-9 CAPLUS

CN Benzoic acid, 2,3,4,5-tetrachloro-6-p-toluyyl-, methyl ester (2CI) (CA INDEX NAME)



=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

patents

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 19:16:49 ON 09 JUN 2007

=> file caplus

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FULL ESTIMATED COST	0.21	0.21

FILE 'CAPLUS' ENTERED AT 19:17:00 ON 09 JUN 2007

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FILE LAST UPDATED: 8 Jun 2007 (20070608/ED)

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=> s 5-iodo-2-methylbenzoic acid

6405842 5

53660 IODO

9181291 2

3872 METHYLBENZOIC

4383782 ACID

1577237 ACIDS

4882753 ACID

(ACID OR ACIDS)

L1 9 5-IODO-2-METHYLBENZOIC ACID

(5(W) IODO(W) 2(W) METHYLBENZOIC(W) ACID)

=> s zeolite

101040 ZEOLITE  
 98705 ZEOLITES  
 L2 122702 ZEOLITE  
 (ZEOLITE OR ZEOLITES)

=> s L1 and L2

L3 2 L1 AND L2

=> d L3 1-2 bib abs

L3 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2005:29295 CAPLUS  
 DN 142:134316  
 TI Process for preparation of 5-iodo-2-methylbenzoic acid  
 IN Yoshimura, Takafumi; Hidaka, Toshio; Sato, Yoshifumi; Fushimi, Norio; Yamada, Kazuhiro  
 PA Mitsubishi Gas Chemical Company, Inc., Japan  
 SO PCT Int. Appl., 36 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005003073	A1	20050113	WO 2004-JP9696	20040701
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005023053	A	20050127	JP 2003-270652	20030703
	JP 2005139077	A	20050602	JP 2003-374481	20031104
	JP 2005139078	A	20050602	JP 2003-374482	20031104
	JP 2005139079	A	20050602	JP 2003-374483	20031104
	EP 1642881	A1	20060405	EP 2004-747165	20040701
	R: CH, DE, FR, GB, IT, LI				
	CN 1812954	A	20060802	CN 2004-80018126	20040701
	US 2006167312	A1	20060727	US 2005-563088	20051230
PRAI	JP 2003-270652	A	20030703		
	JP 2003-374481	A	20031104		
	JP 2003-374482	A	20031104		
	JP 2003-374483	A	20031104		
	WO 2004-JP9696	W	20040701		

OS CASREACT 142:134316

AB This invention pertains to a method for producing 5-iodo-2-methylbenzoic acid by iodizing 2-methylbenzoic acid in the presence of a microporous compound, iodine, an oxidizing agent, and acetic anhydride. By the process, 5-iodo-2-methylbenzoic acid, which is useful in functional chems. such as medicines, can be easily obtained as a high-purity compound in a high yield. The production steps comprising reaction and separation/purification are simple from the standpoint of process operation and the purification load is small. Furthermore, the microporous compound, e.g., a zeolite catalyst, separated and recovered from the liquid resulting from the reaction can be repeatedly used after a simple treatment. Consequently, the catalyst has a long life and the target compound can be produced by the efficient process.

RE.CNT 18      THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3    ANSWER 2 OF 2    CAPLUS    COPYRIGHT 2007 ACS on STN  
AN    2004:675704    CAPLUS  
DN    141:206911  
TI    Process for preparation of iodine compounds and production of high-purity  
5-iodo-2-methylbenzoic acid  
IN    Hidaka, Toshio; Yoshimura, Takafumi; Sato, Yoshifumi; Fushimi, Norio;  
Doya, Masaharu  
PA    Mitsubishi Gas Chemical Company, Inc., Japan  
SO    PCT Int. Appl., 37 pp.  
CODEN: PIXXD2  
DT    Patent  
LA    Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004069772	A1	20040819	WO 2004-JP1367	20040210
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2004262769	A	20040924	JP 2003-32187	20030210
	JP 2004262770	A	20040924	JP 2003-32671	20030210
	EP 1595862	A1	20051116	EP 2004-709714	20040210
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1747910	A	20060315	CN 2004-80003902	20040210
	US 2006161028	A1	20060720	US 2006-545005	20060302
PRAI	JP 2003-32187	A	20030210		
	JP 2003-32671	A	20030210		
	WO 2004-JP1367	W	20040210		

OS    CASREACT 141:206911; MARPAT 141:206911

AB    This invention pertains to a method for the production of iodine compds. by reacting iodine with a substrate either in the presence of a porous compound having a pore diameter of 500 nm or below or in the presence of such a porous compound and an oxidizing agent; and a process for the production of high-purity 5-iodo-2-methyl- benzoic acid which comprises the iodination step according to the above process, the crystallization/separation step of precipitating the reaction product either by the addition of water or by cooling and separating the precipitated crystalline substance, and the purification step of recrystg. the crystalline substance from an organic solvent. According to the former process, iodine can be introduced into various substrates with high selectivity without using any expensive metal or any special reagent, so that the process can be easily carried out industrially and can give high-purity products. According to the latter process, 5-iodo-2-methylbenzoic acid useful in the field of functional chems. such as drugs can be easily produced at high purity and in high yield.

=>

---Logging off of STN---

=> s 2-methyl benzoic acid  
 9223036 2  
 1015662 METHYL  
 679 METHYLS  
 1016076 METHYL  
 (METHYL OR METHYLS)  
 944817 ME  
 10774 MES  
 951570 ME  
 (ME OR MES)  
 1624643 METHYL  
 (METHYL OR ME)  
 92641 BENZOIC  
 14 BENZOICS  
 92651 BENZOIC  
 (BENZOIC OR BENZOICS)  
 4403313 ACID  
 1582459 ACIDS  
 4903648 ACID  
 (ACID OR ACIDS)  
 L1 28 2-METHYL BENZOIC ACID  
 (2 (W) METHYL (W) BENZOIC (W) ACID)

=> s iodination  
 16354 IODINATION  
 104 IODINATIONS  
 L2 16382 IODINATION  
 (IODINATION OR IODINATIONS)

=> s L1 and L2  
 L3 1 L1 AND L2

=> d L3 bib abs

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2004:675704 CAPLUS <<LOGINID::20070718>>  
 DN 141:206911  
 TI Process for preparation of iodine compounds and production of high-purity  
 5-iodo-2-methylbenzoic acid  
 IN Hidaka, Toshio; Yoshimura, Takafumi; Sato, Yoshifumi; Fushimi, Norio;  
 Doya, Masaharu  
 PA Mitsubishi Gas Chemical Company, Inc., Japan  
 SO PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004069772	A1	20040819	WO 2004-JP1367	20040210
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO				
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	JP 2004262769	A	20040924	JP 2003-32187	20030210
	JP 2004262770	A	20040924	JP 2003-32671	20030210
	EP 1595862	A1	20051116	EP 2004-709714	20040210
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

	CN 1747910	A	20060315	CN 2004-80003902	20040210
	US 2006161028	A1	20060720	US 2006-545005	20060302
PRAI	JP 2003-32187	A	20030210		
	JP 2003-32671	A	20030210		
	WO 2004-JP1367	W	20040210		

OS CASREACT 141:206911; MARPAT 141:206911

AB This invention pertains to a method for the production of iodine compds. by reacting iodine with a substrate either in the presence of a porous compound having a pore diameter of 500 nm or below or in the presence of such a porous compound and an oxidizing agent; and a process for the production of high-purity

5-iodo-2-methyl- benzoic acid  
which comprises the iodination step according to the above process, the crystallization/separation step of precipitating the reaction product either by the addition of water or by cooling and separating the precipitated crystalline substance, and the purification step of recrystg. the crystalline substance from an organic solvent.

According to the former process, iodine can be introduced into various substrates with high selectivity without using any expensive metal or any special reagent, so that the process can be easily carried out industrially and can give high-purity products. According to the latter process, 5-iodo-2-methylbenzoic acid useful in the field of functional chems. such as drugs can be easily produced at high purity and in high yield.

=> s 2-methylbenzoic acid

9223036 2  
3913 METHYLBENZOIC  
4403313 ACID  
1582459 ACIDS  
4903648 ACID

(ACID OR ACIDS)

L4 946 2-METHYLBENZOIC ACID  
(2 (W) METHYLBENZOIC (W) ACID)

=> s 5-iodo-2-methylbenzoic acid

6434990 5  
53798 IODO  
9223036 2  
3913 METHYLBENZOIC  
4403313 ACID  
1582459 ACIDS  
4903648 ACID

(ACID OR ACIDS)

L5 9 5-iodo-2-METHYLBENZOIC ACID  
(5 (W) IODO (W) 2 (W) METHYLBENZOIC (W) ACID)

=> d L5 bib abs

L5 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2006:209789 CAPLUS <<LOGINID::20070718>>  
DN 144:273927  
TI Adamantyl derivatives as P2X7 receptor antagonists, their preparation, pharmaceutical compositions, and use in therapy  
IN Ford, Rhonan; Martin, Barrie; Thompson, Toby; Tomkinson, Nicholas; Willis, Paul  
PA Astrazeneca AB, Swed.  
SO PCT Int. Appl., 183 pp.  
CODEN: PIXXD2  
DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006025783	A1	20060309	WO 2005-SE1251	20050829
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1786786	A1	20070523	EP 2005-777146	20050829
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRAI	SE 2004-2103	A	20040830		
	SE 2004-3054	A	20041215		
	SE 2005-766	A	20050406		
	WO 2005-SE1251	W	20050829		
OS	MARPAT 144:273927				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to compds. of formula I, which are P2X7 receptor antagonists, useful for the treatment of inflammatory, immune, or cardiovascular diseases. In compds. I, m is 1, 2 or 3; each R1 is independently either H or a halogen; A is C(O)NH or NHC(O); and Ar is substituted Ph or substituted pyridinyl; including pharmaceutically acceptable salts or solvates thereof. The invention also relates to the preparation of I, pharmaceutical compns. comprising a compound of formula I in association with a pharmaceutically acceptable adjuvant, diluent, or carrier, as well as to the use of the compns. for the treatment of inflammatory, immune, or cardiovascular diseases. Borination of benzamide II with triisopropyl borate followed by hydrolysis, Suzuki coupling with Me 5-bromo-3-pyridinecarboxylate, and ester hydrolysis resulted in the formation of N-(adamantylmethyl)benzamide III. The compds. of the invention were tested for P2X7 antagonistic activity and all expressed pIC50 values higher than 5.5, e.g., compound III expressed pIC50 of 6.8.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=&gt; d L5 1-9 bib abs

L5 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 2006:209789 CAPLUS <<LOGINID::20070718>>  
 DN 144:273927  
 TI Adamantyl derivatives as P2X7 receptor antagonists, their preparation, pharmaceutical compositions, and use in therapy  
 IN Ford, Rhonan; Martin, Barrie; Thompson, Toby; Tomkinson, Nicholas; Willis, Paul  
 PA Astrazeneca AB, Swed.  
 SO PCT Int. Appl., 183 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006025783	A1	20060309	WO 2005-SE1251	20050829
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1786786	A1	20070523	EP 2005-777146	20050829
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRAI	SE 2004-2103	A	20040830		
	SE 2004-3054	A	20041215		
	SE 2005-766	A	20050406		
	WO 2005-SE1251	W	20050829		
OS	MARPAT 144:273927				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to compds. of formula I, which are P2X7 receptor antagonists, useful for the treatment of inflammatory, immune, or cardiovascular diseases. In compds. I, m is 1, 2 or 3; each R1 is independently either H or a halogen; A is C(O)NH or NHC(O); and Ar is substituted Ph or substituted pyridinyl; including pharmaceutically acceptable salts or solvates thereof. The invention also relates to the preparation of I, pharmaceutical compns. comprising a compound of formula I in association with a pharmaceutically acceptable adjuvant, diluent, or carrier, as well as to the use of the compns. for the treatment of inflammatory, immune, or cardiovascular diseases. Borination of benzamide II with triisopropyl borate followed by hydrolysis, Suzuki coupling with Me 5-bromo-3-pyridinecarboxylate, and ester hydrolysis resulted in the formation of N-(adamantylmethyl)benzamide III. The compds. of the invention were tested for P2X7 antagonistic activity and all expressed pIC50 values higher than 5.5, e.g., compound III expressed pIC50 of 6.8.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2005:29295 CAPLUS <<LOGINID::20070718>>  
DN 142:134316  
TI Process for preparation of 5-iodo-2-methylbenzoic acid  
IN Yoshimura, Takafumi; Hidaka, Toshio; Sato, Yoshifumi; Fushimi, Norio; Yamada, Kazuhiro  
PA Mitsubishi Gas Chemical Company, Inc., Japan  
SO PCT Int. Appl., 36 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2005003073 A1 20050113 WO 2004-JP9696 20040701  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

JP 2005023053 A 20050127 JP 2003-270652 20030703  
JP 2005139077 A 20050602 JP 2003-374481 20031104  
JP 2005139078 A 20050602 JP 2003-374482 20031104  
JP 2005139079 A 20050602 JP 2003-374483 20031104  
EP 1642881 A1 20060405 EP 2004-747165 20040701

R: CH, DE, FR, GB, IT, LI

CN 1812954 A 20060802 CN 2004-80018126 20040701  
US 2006167312 A1 20060727 US 2005-563088 20051230

PRAI JP 2003-270652 A 20030703  
JP 2003-374481 A 20031104  
JP 2003-374482 A 20031104  
JP 2003-374483 A 20031104  
WO 2004-JP9696 W 20040701

OS CASREACT 142:134316

AB This invention pertains to a method for producing 5-iodo-2-methylbenzoic acid by iodizing 2-methylbenzoic acid in the presence of a microporous compound, iodine, an oxidizing agent, and acetic anhydride. By the process, 5-iodo-2-methylbenzoic acid, which is useful in functional chems. such as medicines, can be easily obtained as a high-purity compound in a high yield. The production steps comprising reaction and separation/purification are simple from the standpoint of process operation and the purification load is small. Furthermore, the microporous compound, e.g., a zeolite catalyst, separated and recovered from the liquid resulting from the reaction can be repeatedly used after a simple treatment. Consequently, the catalyst has a long life and the target compound can be produced by the efficient process.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2004:675704 CAPLUS <<LOGINID::20070718>>  
DN 141:206911  
TI Process for preparation of iodine compounds and production of high-purity 5-iodo-2-methylbenzoic acid  
IN Hidaka, Toshio; Yoshimura, Takafumi; Sato, Yoshifumi; Fushimi, Norio; Doya, Masaharu  
PA Mitsubishi Gas Chemical Company, Inc., Japan  
SO PCT Int. Appl., 37 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2004069772	A1	20040819	WO 2004-JP1367	20040210
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,				

BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,  
MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG

JP 2004262769 A 20040924 JP 2003-32187 20030210  
JP 2004262770 A 20040924 JP 2003-32671 20030210  
EP 1595862 A1 20051116 EP 2004-709714 20040210

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

CN 1747910 A 20060315 CN 2004-80003902 20040210  
US 2006161028 A1 20060720 US 2006-545005 20060302

PRAI JP 2003-32187 A 20030210  
JP 2003-32671 A 20030210  
WO 2004-JP1367 W 20040210

OS CASREACT 141:206911; MARPAT 141:206911

AB This invention pertains to a method for the production of iodine compds. by reacting iodine with a substrate either in the presence of a porous compound having a pore diameter of 500 nm or below or in the presence of such a porous compound and an oxidizing agent; and a process for the production of

high-purity

5-iodo-2-methyl- benzoic acid which comprises the iodination step according to the above process, the crystallization/separation step of

precipitating the

reaction product either by the addition of water or by cooling and separating

the

precipitated crystalline substance, and the purification step of recrystg. the

crystalline

substance from an organic solvent. According to the former process, iodine can be introduced into various substrates with high selectivity without using any expensive metal or any special reagent, so that the process can be easily carried out industrially and can give high-purity products.

According to the latter process, 5-iodo-2-methylbenzoic acid useful in the field of functional

chems. such as drugs can be easily produced at high purity and in high yield.

L5 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN .

AN 2003:818387 CAPLUS <<LOGINID::20070718>>

DN 139:323536

TI Preparation of [2-(2-alkoxyphenyl)cyclopent-1-enyl] substituted (hetero)aromatic carboxylic acids with high affinity to the EP1 receptor

IN Giblin, Gerard Martin Paul; Hall, Adrian; Hurst, David Nigel; Kilford, Ian Reginald; Lewell, Xiao Qing; Naylor, Alan; Novelli, Riccardo

PA Glaxo Group Limited, UK

SO PCT Int. Appl., 180 pp.

CODEN: PIXXD2

DT Patent

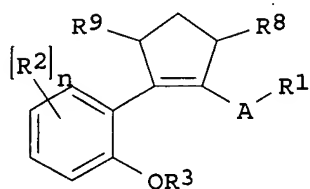
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003084917	A1	20031016	WO 2003-EP3661	20030407
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2481035	A1	20031016	CA 2003-2481035	20030407
	AU 2003216920	A1	20031020	AU 2003-216920	20030407
	EP 1492757	A1	20050105	EP 2003-712136	20030407

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

BR 2003009014	A	20050111	BR 2003-9014	20030407
JP 2005522477	T	20050728	JP 2003-582116	20030407
CN 1659131	A	20050824	CN 2003-812587	20030407
ZA 2004007105	A	20060726	ZA 2004-7105	20040906
US 2005239802	A1	20051027	US 2004-508761	20040922
US 7232821	B2	20070619		
MX 2004PA09800	A	20041213	MX 2004-PA9800	20041007
NO 2004004689	A	20041029	NO 2004-4689	20041029
PRAI GB 2002-8045	A	20020408		
GB 2003-2881	A	20030207		
WO 2003-EP3661	W	20030407		
OS MARPAT 139:323536				
GI				



I

AB The title compds. [I; A = (un)substituted Ph, 5-6 membered heterocyclyl, bicyclic heterocyclyl; R1 = CO2R4, CONR5R6, CH2CO2R4, alkyl, etc.; R2 = halo, alkyl, CN, etc.; R3 = alkyl wherein 1 or 2 of the non-terminal carbon atoms may optionally be replaced by NR4, O, SOn (n = 0-2), etc.; R4, R5 = H, alkyl; R6 = H, alkyl, SO2aryl, etc.; R8, R9 = H, alkyl; n = 0-2], useful for treating condition which is mediated by the action of PGE2 at EP1 receptors, were prepared E.g., a multi-step synthesis of [2-(5-chloro-2-benzyloxyphenyl)cyclopent-1-enyl]benzoic acid (starting from 1,2-dibromocyclopentene and (3-ethoxycarbonylphenyl)boronic acid), was given. The compds. I had an antagonist pIC50 value of between 7.0 and 9.5 at EP1 receptors and pIC50 value of <6.0 at EP3 receptors. Pharmaceutical composition comprising the compound I is claimed.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2003:239838 CAPLUS <<LOGINID::20070718>>  
DN 138:273299  
TI Method for separation and purification of 3-iodo-2-methylbenzoic acid and 5-iodo-2-methylbenzoic acid  
IN Aizawa, Akira; Nakamura, Eiji  
PA Ise Chemical Industries Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF

DT Patent  
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003089673	A	20030328	JP 2001-282541	20010918
PRAI	JP 2001-282541		20010918		

AB In the title method, 3-iodo-2-methylbenzoic acid (I) and 5-iodo-2-methylbenzoic acid (II) are converted into their alkali metal salts, and the pH of the aqueous solution of alkali metal salts of I and II is adjusted to  $5 \pm 0.5$  at room temperature to give II crystals which are collected by filtration, then acid is added to

the filtrate to adjust the pH to the range of 2 - 3 to give I crystals.  
II (with 98.4% purity) was obtained by the title method.

L5 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2003:34906 CAPLUS <<LOGINID::20070718>>  
DN 138:89580  
TI Preparation of moniodomethylbenzoic acid  
IN Ikari, Kazuo; Takayama, Koji; Aizawa, Akira  
PA Ise Chemical Industries Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
FAN.CNT 1

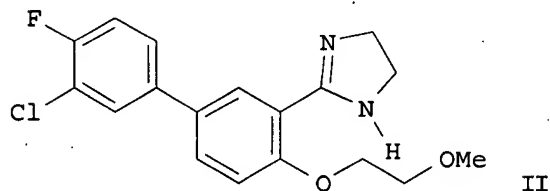
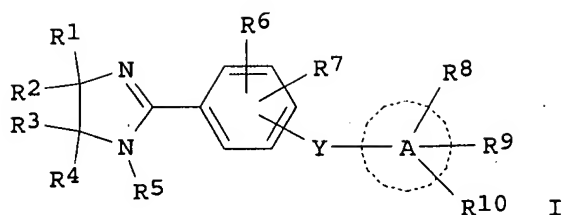
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003012597	A	20030115	JP 2001-200987	20010702
PRAI	JP 2001-200987		20010702		

OS CASREACT 138:89580  
AB The compound is prepared by direct iodination of methylbenzoic acid with iodinating agents in the presence of acid catalysts in solvents.  
2-Methylbenzoic acid was reacted with I and periodic acid in the presence of H<sub>2</sub>SO<sub>4</sub> in AcOH under reflux for 7 h to give 54% reaction product mixture containing 3.2% 3-iodo-2-methylbenzoic acid and 95.7% 5-iodo-2-methylbenzoic acid.

L5 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2000:911225 CAPLUS <<LOGINID::20070718>>  
DN 134:71593  
TI Preparation of imidazoline derivatives for the treatment of diabetes, especially type II diabetes  
IN Paal, Michael; Ruehter, Gerd; Schotten, Theo  
PA Eli Lilly and Company, USA  
SO PCT Int. Appl., 143 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000078726	A1	20001228	WO 2000-US11881	20000619
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	GB 2351081	A	20001220	GB 1999-14222	19990618
PRAI	GB 1999-14222	A	19990618		

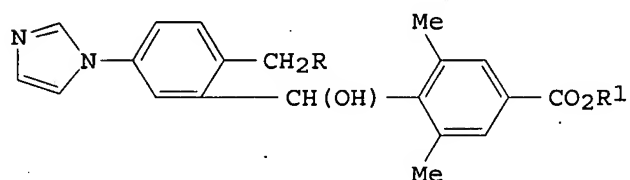
OS MARPAT 134:71593  
GI



AB The title compds. [I; R1-R4 = H, alkyl; R1 and R3, together with the carbon atoms to which they are attached, combine to form a C3-7 carbocyclic ring and R2 and R4 = H, alkyl; R1 and R2, together with the carbon atom to which they are attached combine to form a C3-7 spirocarbocyclic ring and R3 and R4 = H, alkyl; R3 and R4, together with the carbon atom to which they are attached combine to form a C3-7 spirocarbocyclic ring and R1 and R2 = H, alkyl; R5 = H, alkyl, aryl, etc.; R6 = H, alkyl, alkoxy, etc.; R7 = H, alkyl, alkoxy, etc.; Y = NHCONH, NHCO, a bond, etc.; A = a monocyclic or bicyclic ring; R8 = H, alkyl, alkenyl, etc.; R9, R10 = H, alkyl, alkoxy, etc.], useful for the treatment of diabetes, diabetic complications, metabolic disorders, or related diseases where impaired glucose disposal is present (no data), were prepared and formulated. E.g., a multi-step synthesis of the imidazoline II.HCl was given. The compds. I are effective at 0.1-5 mg/kg/day.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1990:15886 CAPLUS <<LOGINID::20070718>>  
DN 112:15886  
TI Pharmacokinetics of sodium 4-[ $\alpha$ -hydroxy-5-(1-imidazolyl)-2-methylbenzyl]-3,5-dimethylbenzoate (Y-20811), a new thromboxane synthetase inhibitor. I. Isolation and structure elucidation of urinary metabolite in dogs.  
AU Iwata, Toshio; Tsuruda, Mineo; Demizu, Kenichi; Isobe, Masao; Takamatsu, Rikuo; Yokobe, Tetsuo  
CS Res. Lab., Yoshitomi Pharm. Ind. Ltd., Fukuoka, 871, Japan  
SO Yakugaku Zasshi (1989), 109(9), 636-41  
CODEN: YKKZAJ; ISSN: 0031-6903  
DT Journal  
LA Japanese  
GI



I, R=H, R1=Na  
II, R=OH, R1=H

AB The urinary metabolites of Y-20811 (I) in dogs were investigated. The main metabolite was isolated by HPLC and subsequent preparative TLC. The structure of this metabolite was established as 4-[ $\alpha$ -hydroxy-2-hydroxymethyl-5-(1-imidazolyl)benzyl]-3,5-dimethylbenzoic acid (II) on the basis of spectral analyses and confirmed by its total synthesis.

L5 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1946:8333 CAPLUS <<LOGINID::20070718>>

DN 40:8333

OREF 40:1473c-h

TI Reactions of acetophenols with iodine and pyridine and the preparation of hydroxybenzoic acids

AU King, L. Carroll; McWhirter, Margaret; Barton, Daniel M.

CS Northwestern Univ., Evanston, IL

SO Journal of the American Chemical Society (1945), 67, 2089-92

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA Unavailable

OS CASREACT 40:8333

AB cf. C.A. 38,3981.1, 5842.4. In the following 0.1 mol of the hydroxyacetophenones, 0.1 mol iodine, and 40 g. C<sub>5</sub>H<sub>5</sub>N were heated 1 h. on the steam bath, the reaction mixture allowed to stand overnight, and the product washed with ether and then with cold H<sub>2</sub>O; the aqueous solution of the iodide and HClO<sub>4</sub> give the perchlorates. The crude yields of the iodides are given, since purification causes considerable losses. Cleavage with NaOH gives the corresponding benzoic acids. o-HOC<sub>6</sub>H<sub>4</sub>Ac gives 1-(R-benzoylmethyl)pyridinium iodide (I); where R = 2-hydroxy, 19 g., m. 211-15° (perchlorate, m. 193-6°); 85% o-HOC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H, m. 156-8°. I, R = 2-hydroxy-5-Me, 29 g., m. 180-2° (perchlorate, m. 201-3°); 95% of 5,2-Me(HO)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>H, m. 148-50°. I, R = 2-hydroxy-4-Me, 23 g., m. 215-17° (perchlorate, m. 212-15°); 44% of 4,2-Me(HO)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>H, m. 172-4°. I, R = 2-hydroxy-3-Me, 24 g., m. 217-18° (perchlorate, m. 225-35°); 75% of 3,2-Me(HO)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>H, m. 158-60°. In the case of m- and p-HOC<sub>6</sub>H<sub>4</sub>Ac, the reaction gives an isomer of I and an iodine derivative, which can be separated by the greater solubility

of the former in H<sub>2</sub>O or dilute EtOH. m-HOC<sub>5</sub>H<sub>4</sub>Ac gives 18 g. of I, R = 3-hydroxy, m. 223-8° (perchlorate, m. 224-6°) (40% of m-HOC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H, m. 197-201°), and 1.2 g. of I, R = 3-hydroxy-4-iodo, m. 239-42° (perchlorate, m. 260-3°) (95% of 4,3-I(HO)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>H, m. 226-30°). p-HOC<sub>6</sub>H<sub>4</sub>Ac gives 17 g. of I, R = 4-hydroxy, m. 215-19° (perchlorate, m. 181-3°) (98% of p-HOC<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H, m. 212-13°), and 8.7 g. of I, R = 4-hydroxy-3-iodo, m. 235-40° (perchlorate, m. 253-7°) (79% of 3,4-I(HO)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>H, m. 172-5°). I, R = 4-hydroxy-3-Me, 29 g., m. 220-7° (perchlorate, m. 237-40°) (75% of 3,4-Me(HO)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>H, m. 172-4°), and 2.5 g. of I, R = 4-hydroxy-5-iodo-3-Me, m. 227-32° (perchlorate, m. 239-42°) (67% of 4-hydroxy-5-iodo-3-methylbenzoic acid, m. 216-18°). I, R = 4-hydroxy-2-Me, 20 g., m. 246-8° (perchlorate, m. 196-9°) (82% of 2,4-Me(HO)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>H, m. 177-9°), and 11 g. of I, R = 4-hydroxy-5-iodo-2-Me, m. 240-4° (perchlorate, m. 260-6°) (61% of 4-hydroxy-5-iodo-2-methylbenzoic acid, m. 210-12°). 1-(2,4-Dihydroxybenzoylmethyl)pyridinium iodide, m. 241-2° (perchlorate, m. 253-5°); 72% of 2,4-(HO)C<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>H, m. 218-19°.

=> s iodination of benzoic acids  
16354 IODINATION

104 IODINATIONS  
 16382 IODINATION  
 (IODINATION OR IODINATIONS)  
 92641 BENZOIC  
 14 BENZOICS  
 92651 BENZOIC  
 (BENZOIC OR BENZOICS)  
 1582459 ACIDS  
 L6 1 IODINATION OF BENZOIC ACIDS  
 (IODINATION(1W)BENZOIC(W)ACIDS)

=> d L6 bib abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
 AN 1984:67569 CAPLUS <<LOGINID::20070718>>  
 DN 100:67569  
 TI Kinetics of iodination of some substituted benzoic acids by  
 N-iodosuccinimide  
 AU Radhakrishnamurti, P. S.; Panda, B. K.  
 CS Dep. Chem., Berhampur Univ., Berhampur, 760 007, India  
 SO Indian Journal of Chemistry, Section A: Inorganic, Physical, Theoretical  
 & Analytical (1983), 22A(9), 770-3  
 CODEN: IJCADU; ISSN: 0376-4710  
 DT Journal  
 LA English  
 AB The iodination of RC6H4CO2H (R = p-NH2, o-OH, p-OH, o-AcNH, p-AcNH, o-MeO,  
 p-MeO, o-NH2) by N-iodosuccinimide (I) in mixts. of AcOH and HClO4 follows  
 first-order kinetics with respect to the halogenating agent. I and  
 protonated I form intermediate complexes with the substrate; this is  
 substantiated by a low  $\rho$  (-1.6) and high neg. entropy. The complexes  
 are cleaved in slow steps to give the intermediate products which  
 rearrange to stable nuclear iodinated products in subsequent steps.

=> FIL STNGUIDE

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FULL ESTIMATED COST	68.94	69.15
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-9.36	-9.36

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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